

Impact of Changing NH3 Emissions

4x5 Degree Emission Files:

`$ROOT/NH3/v2014-07/NH3_geos.4x5.nc`

`$ROOT/NH3/v2014-07/NH3_biofuel.geos.4x5.nc`

1x1 Degree Emission Files:

`$ROOT/NH3/v2014-07/NH3_geos.1x1.nc`

`$ROOT/NH3/v2014-07/NH3_biofuel.geos.1x1.nc`

Simulation Details

GEOS-Chem Version 11-01

4x5 Degree Resolution

GEOS-FP Meteorology

Tropchem Chemistry

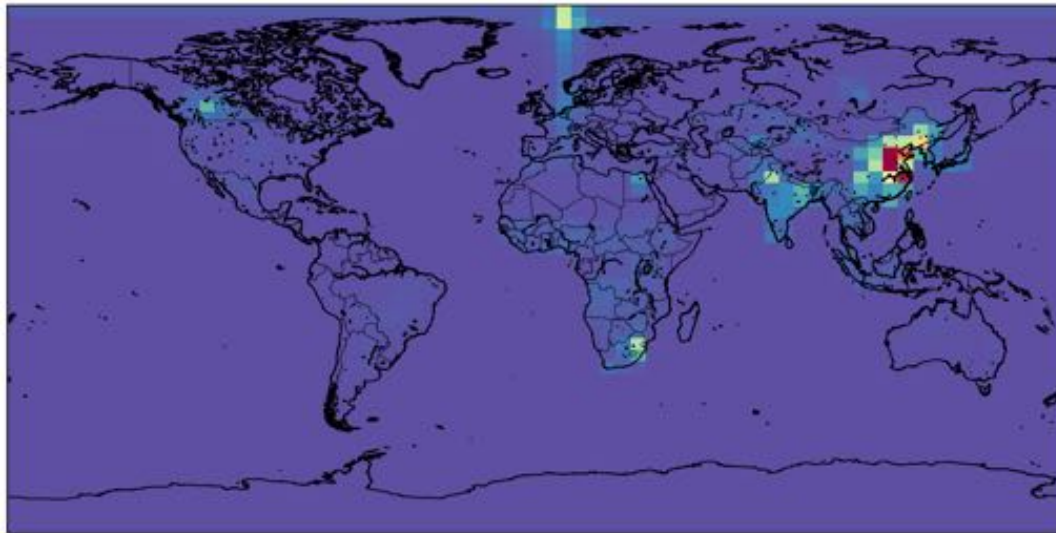
Spin Up = 1st July 2015 - 1st January 2016

Production Run = 1st January 2016 - 1st January 2017

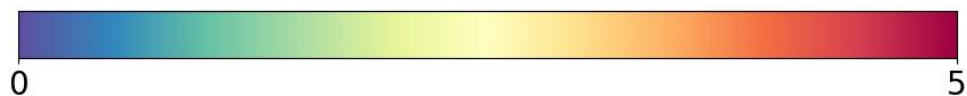
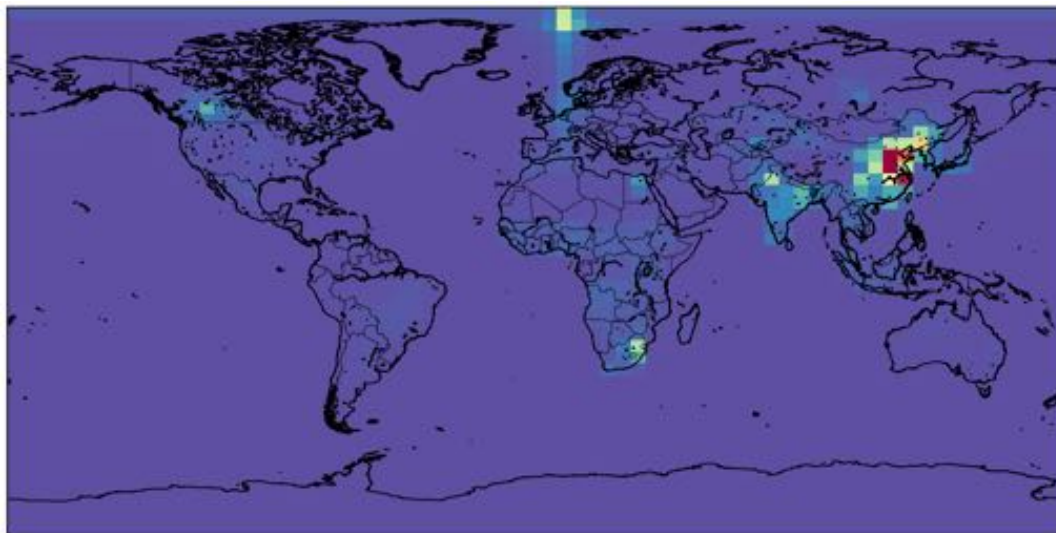
Data averaged for 2016

NO

4x5

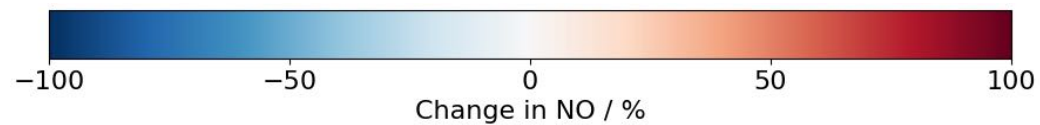
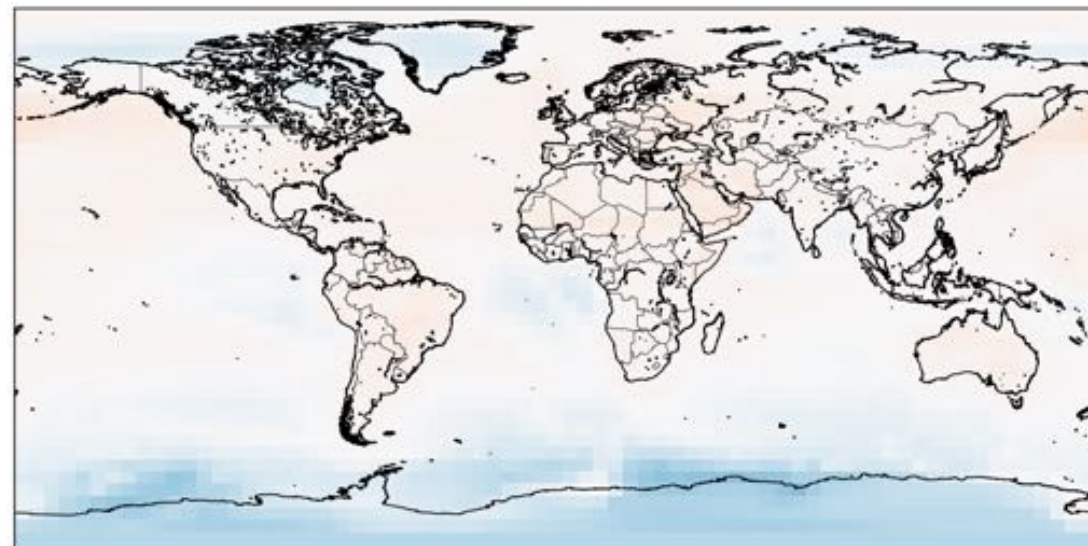


1x1



NO / ppbv

Percentage Difference

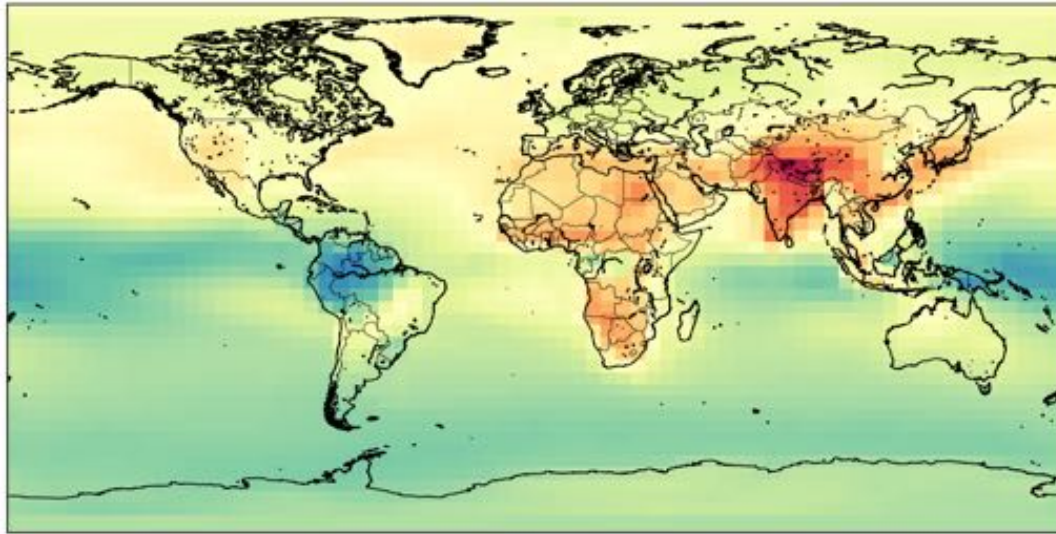


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

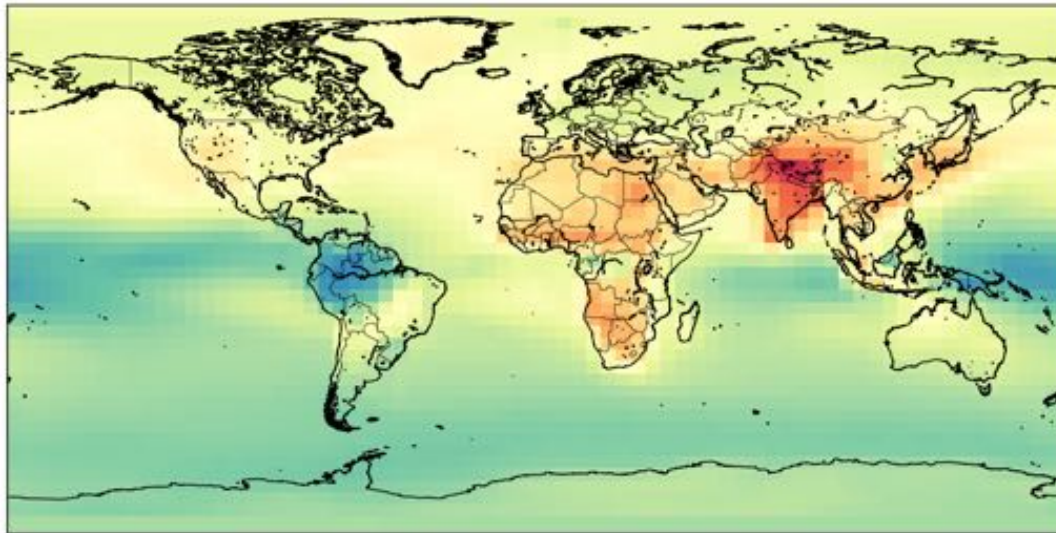
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

O3

4x5

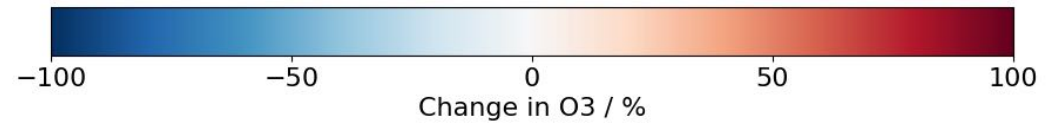
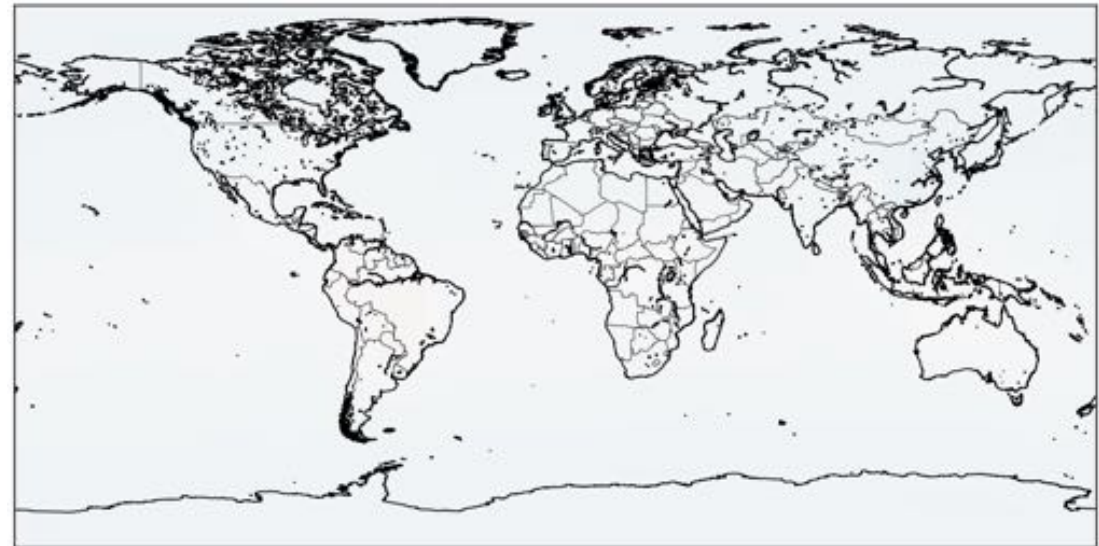


1x1



O3 / ppbv

Percentage Difference

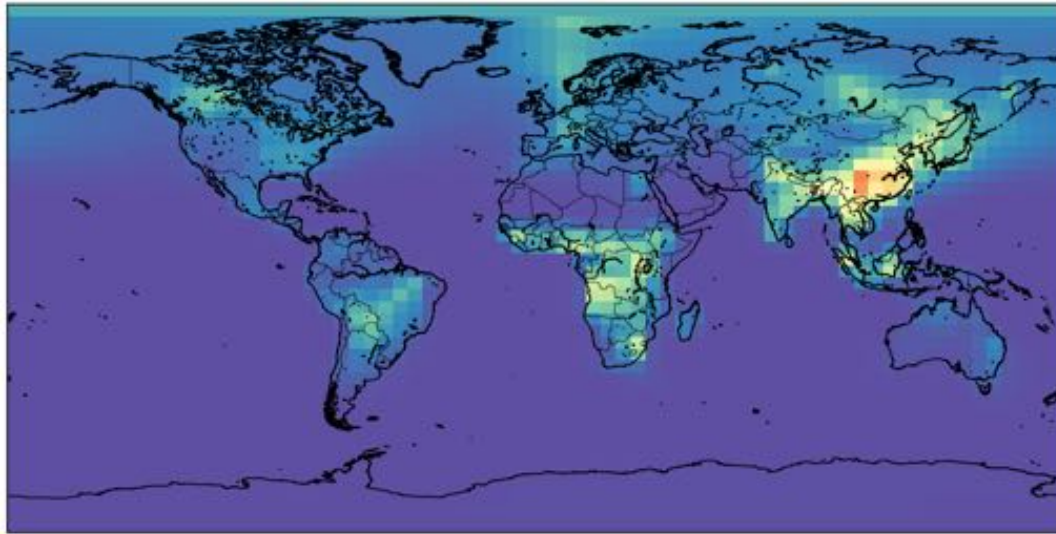


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

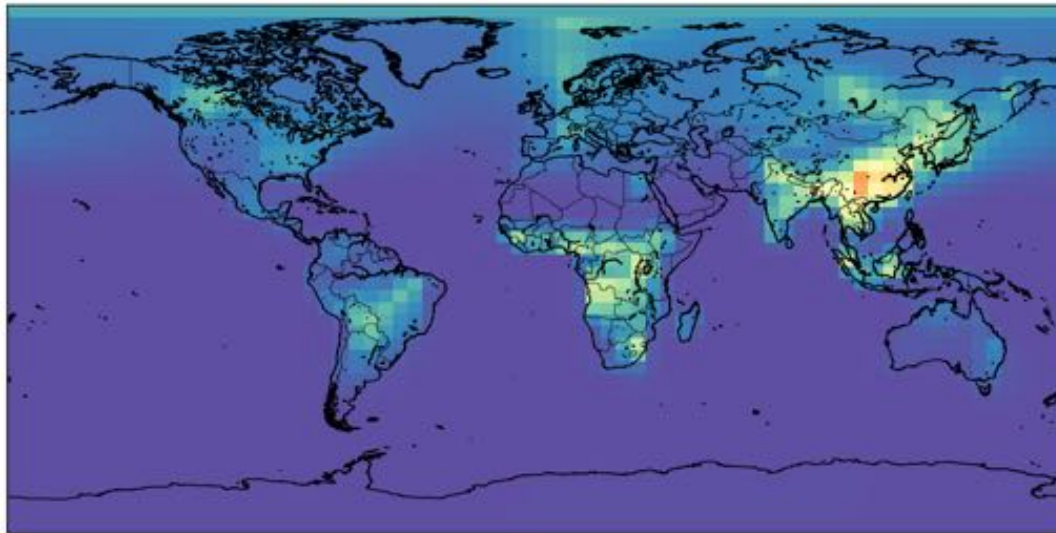
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

PAN

4x5

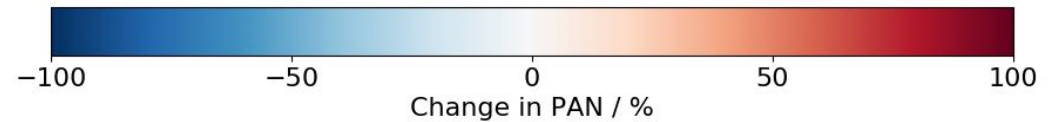
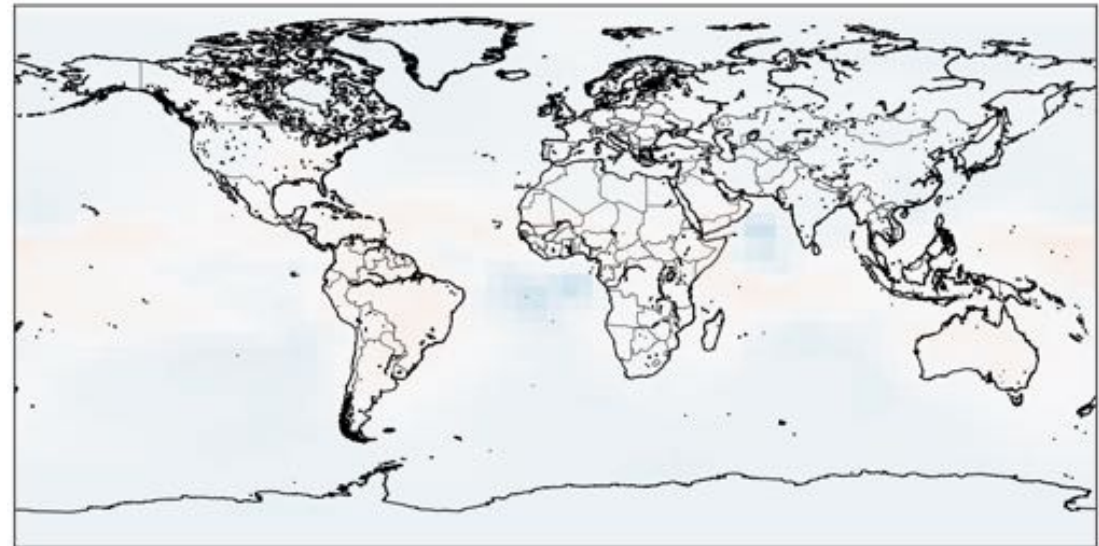


1x1



PAN / ppbv

Percentage Difference

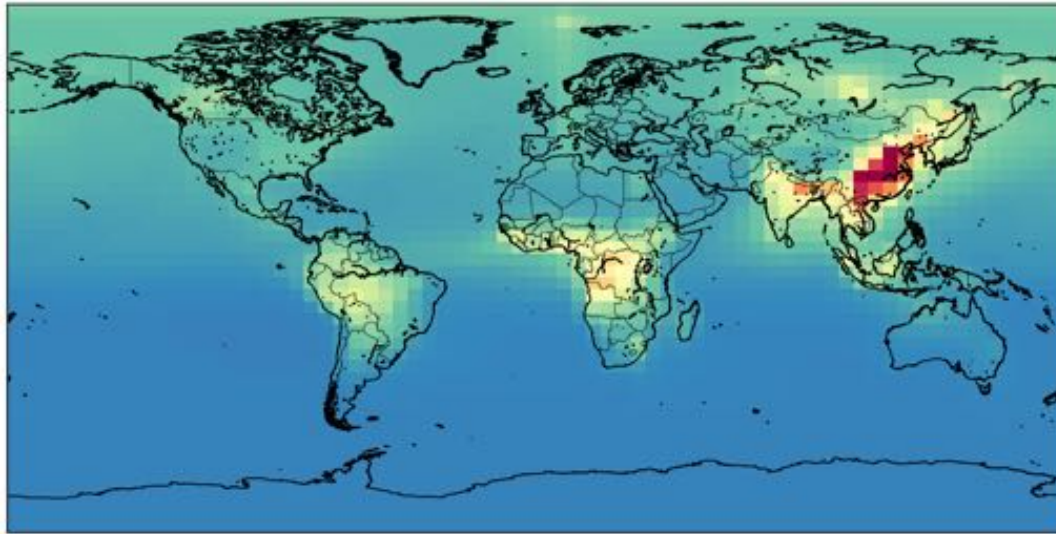


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

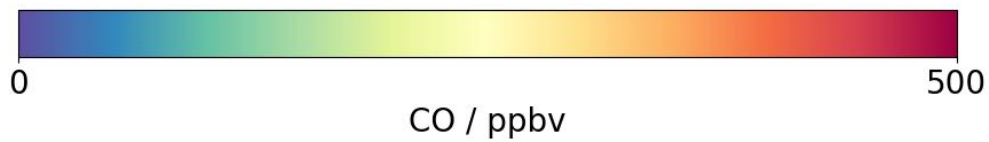
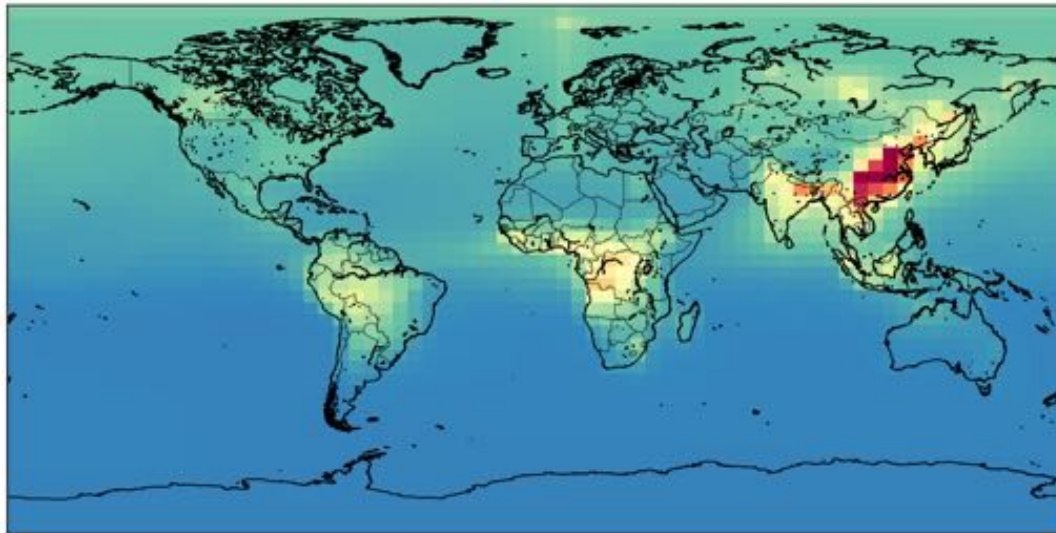
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

CO

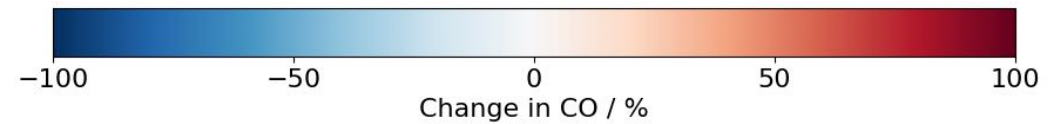
4x5



1x1



Percentage Difference

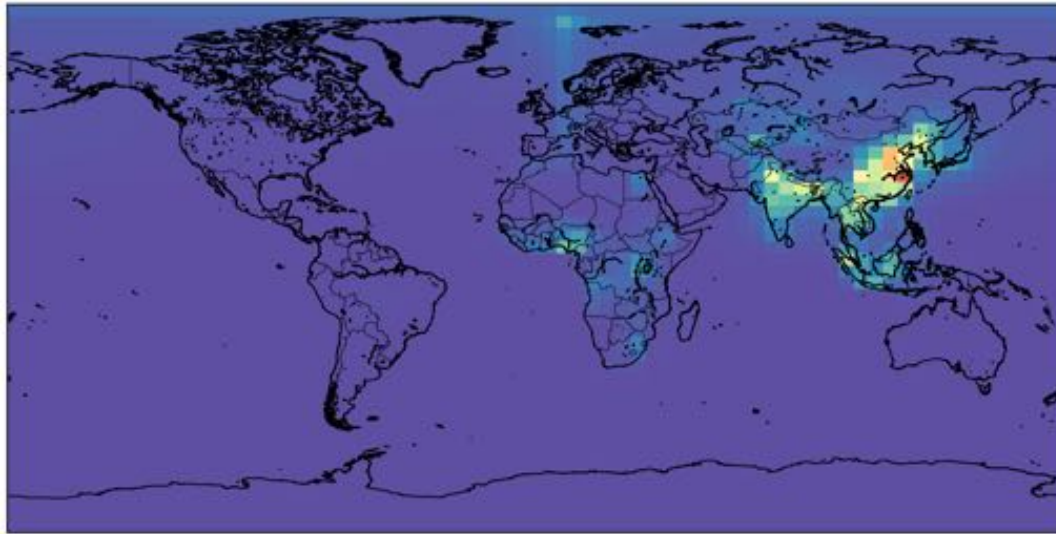


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

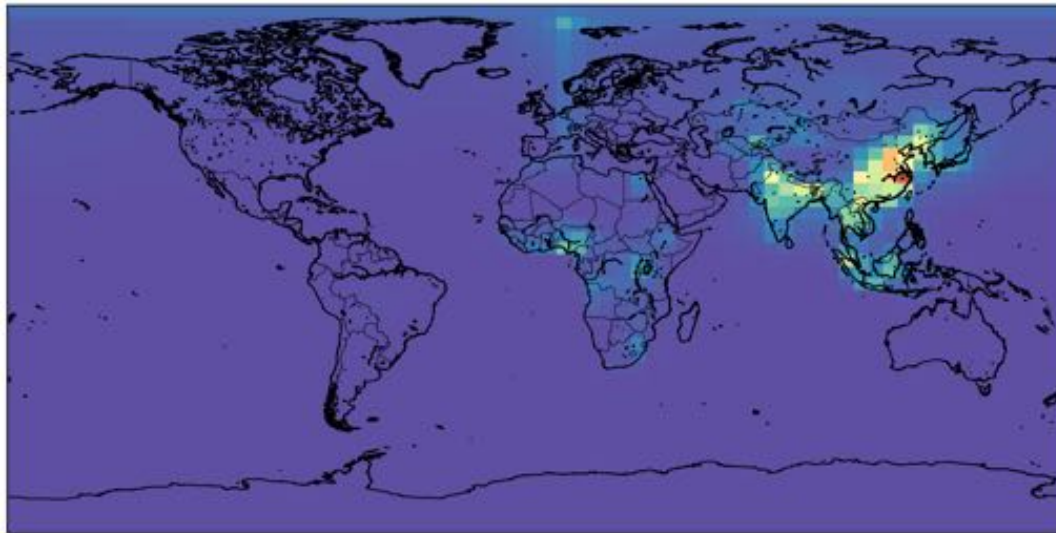
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

ALK4

4x5

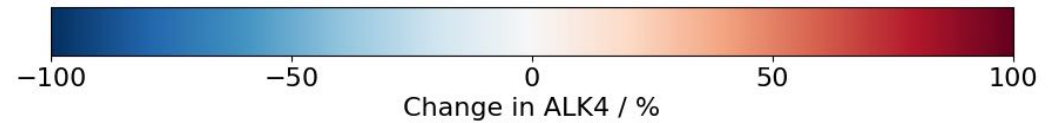
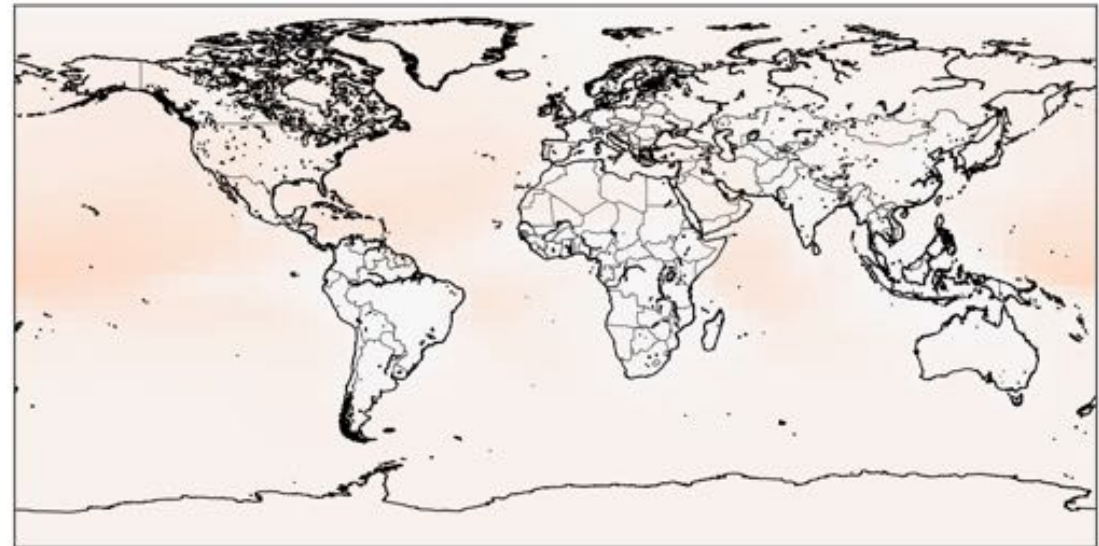


1x1



ALK4 / ppbv

Percentage Difference

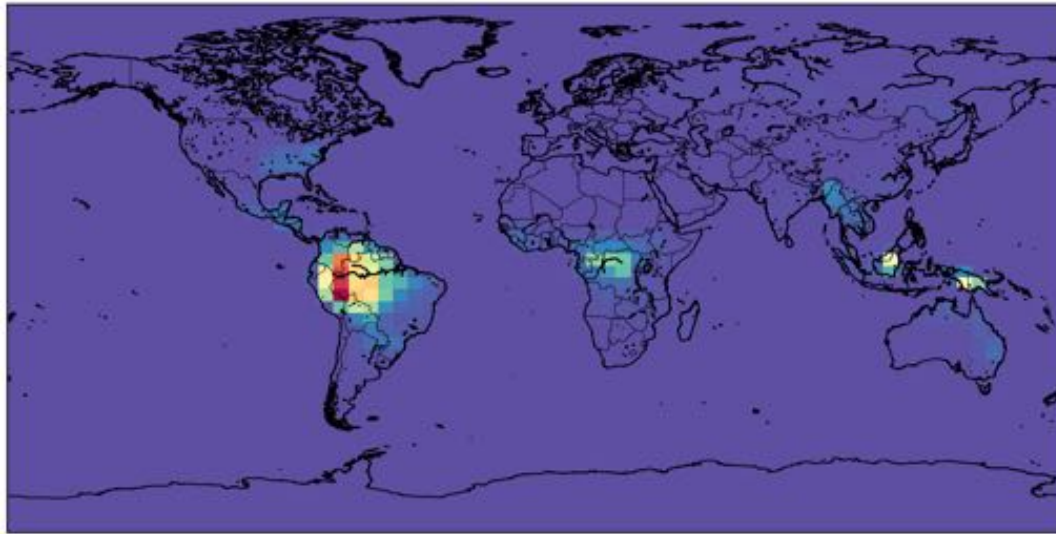


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

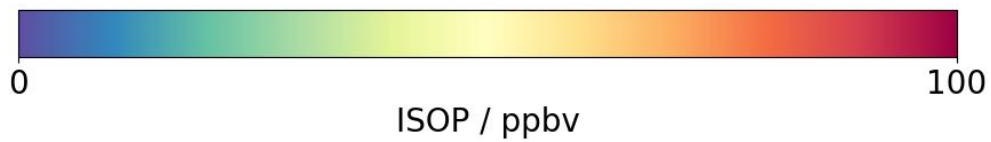
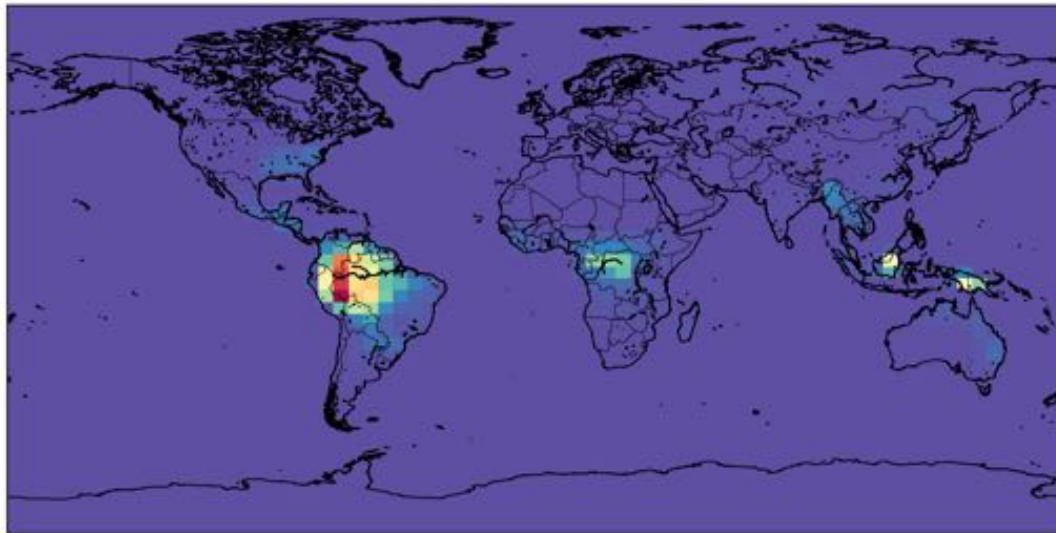
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

ISOP

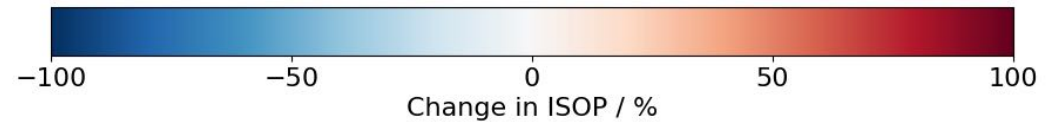
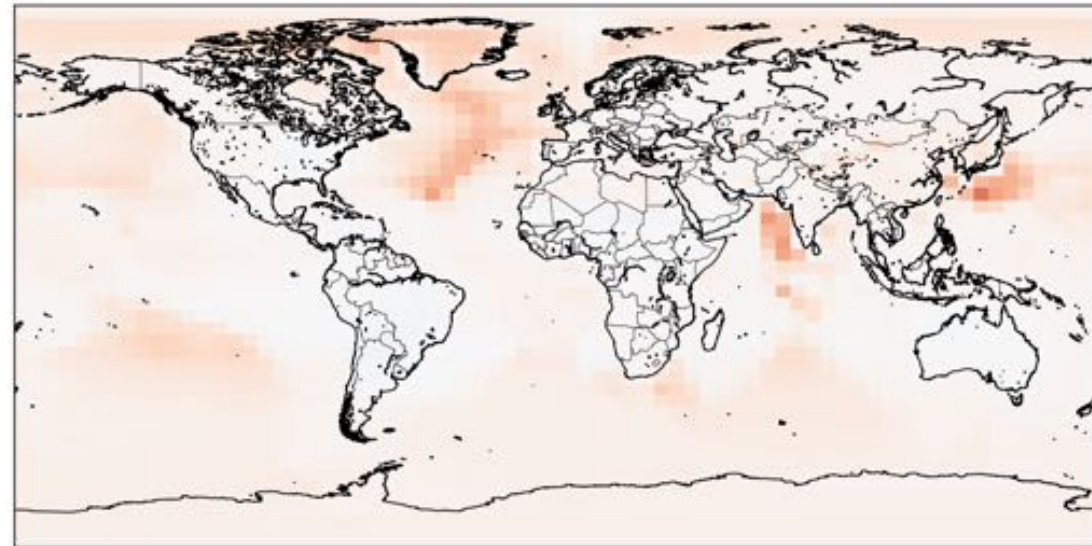
4x5



1x1



Percentage Difference

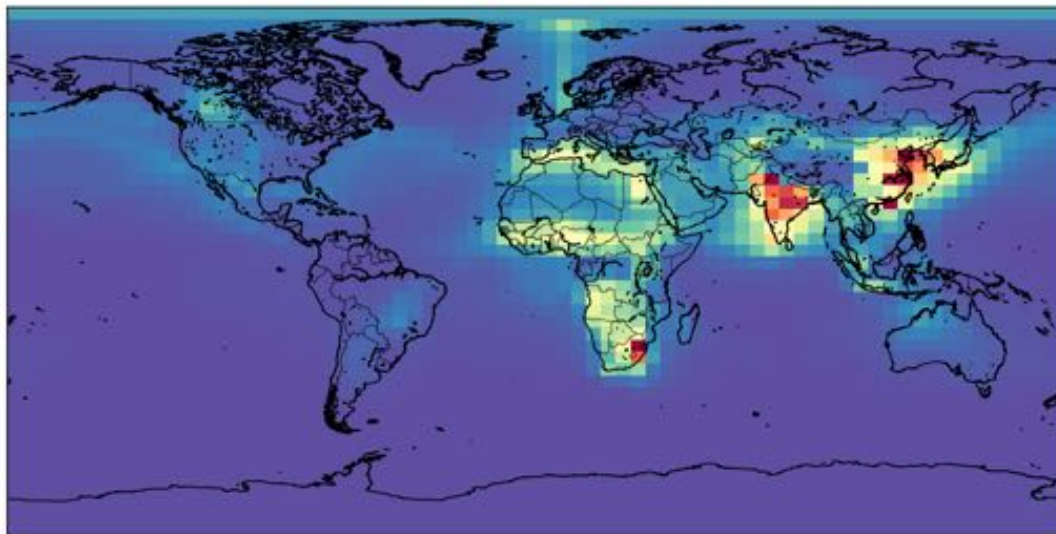


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

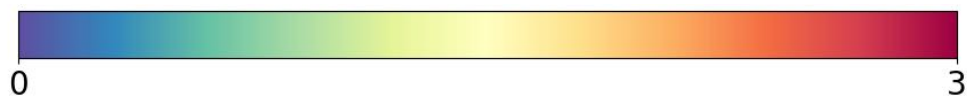
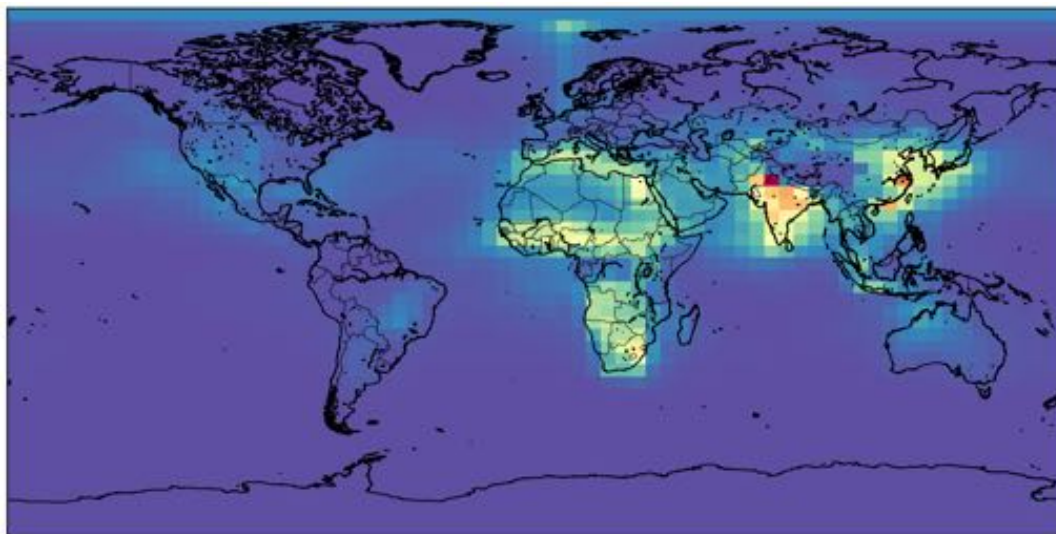
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

HNO₃

4x5

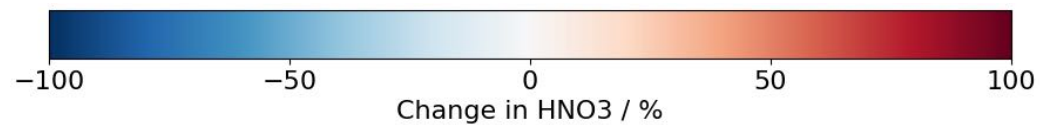
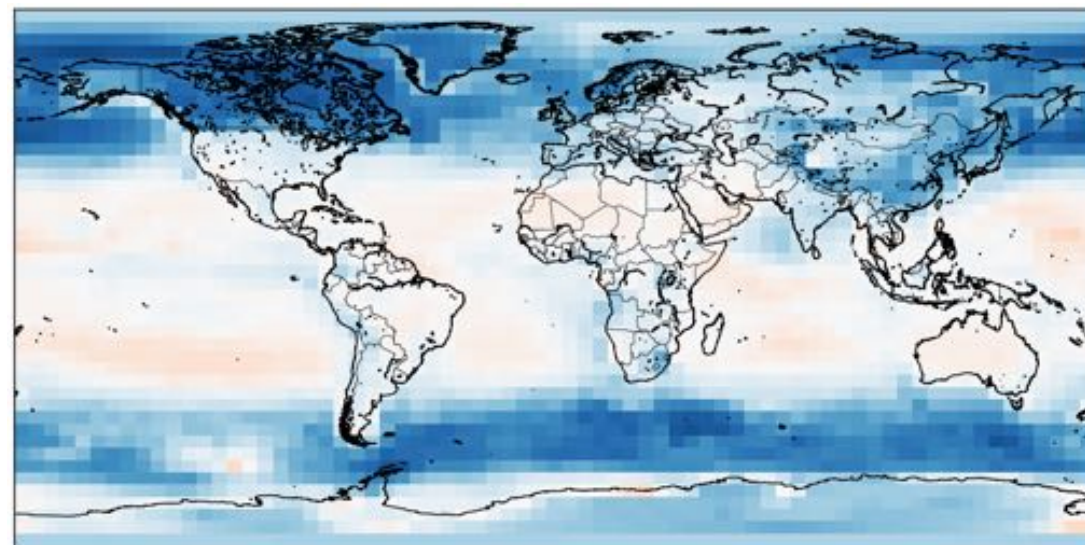


1x1



HNO₃ / ppbv

Percentage Difference

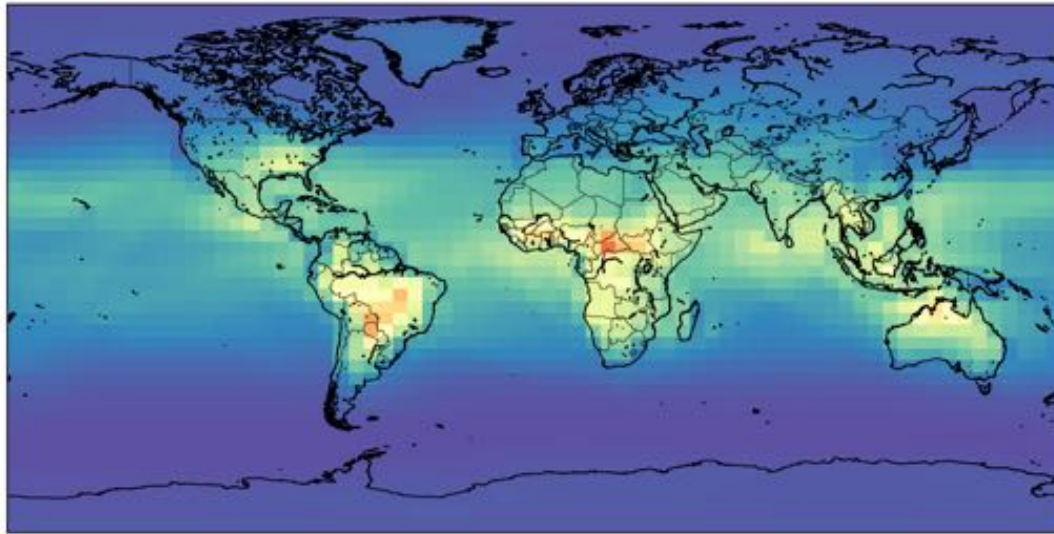


Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

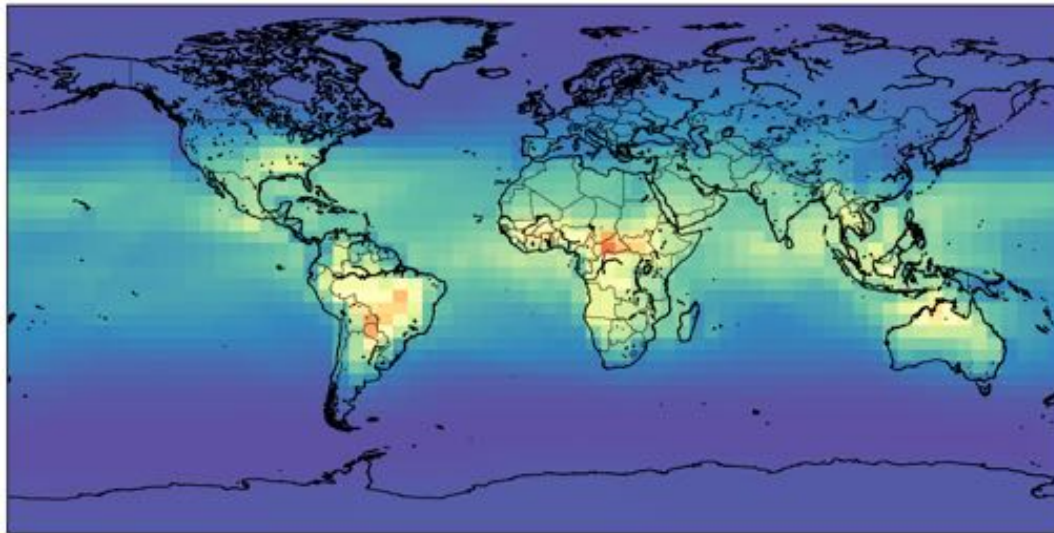
Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions

H2O2

4x5

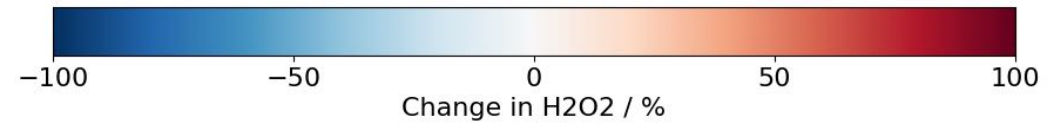


1x1



H2O2 / ppbv

Percentage Difference

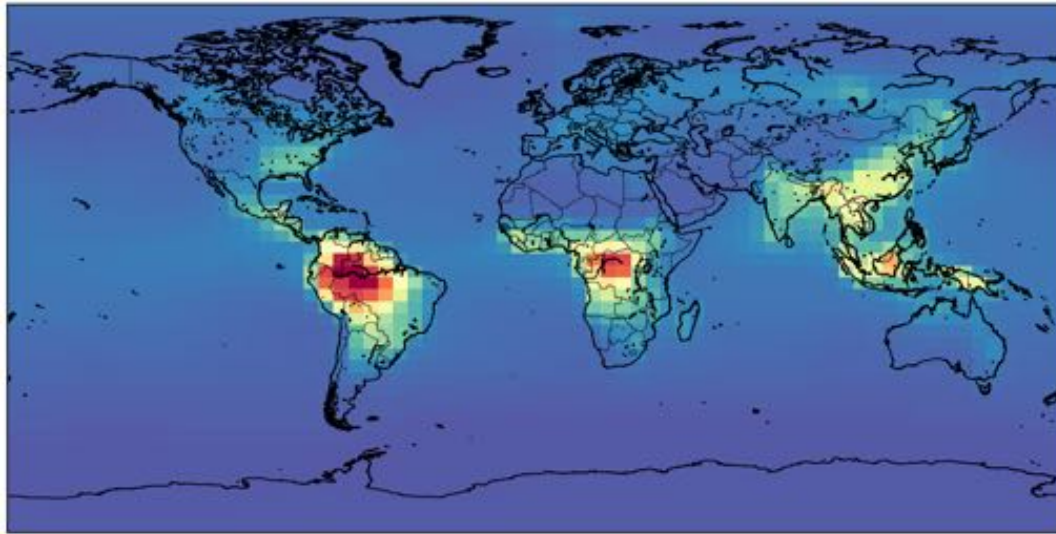


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

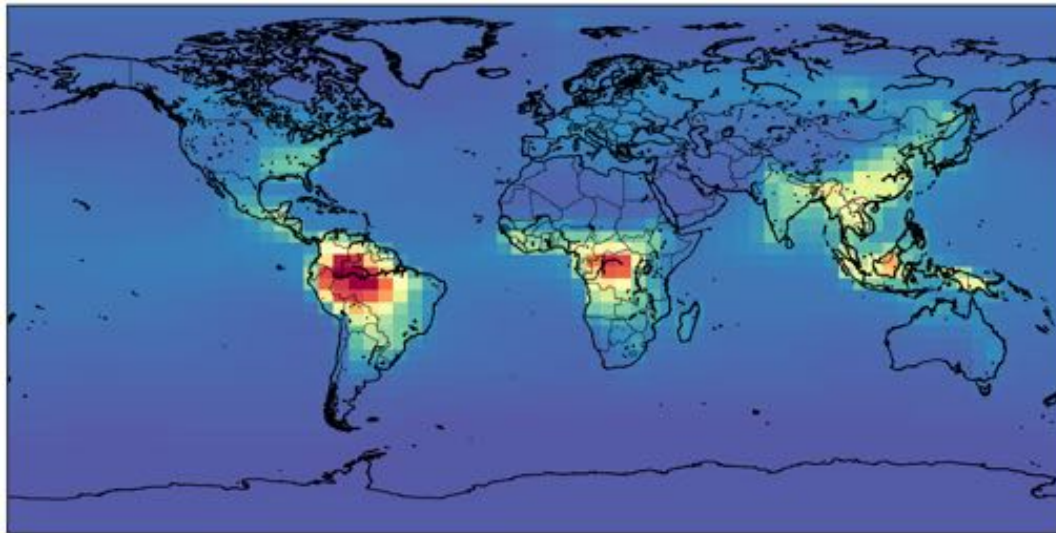
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

ACET

4x5

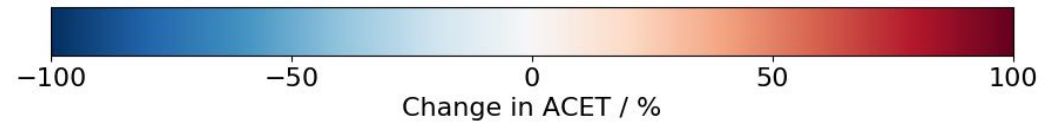
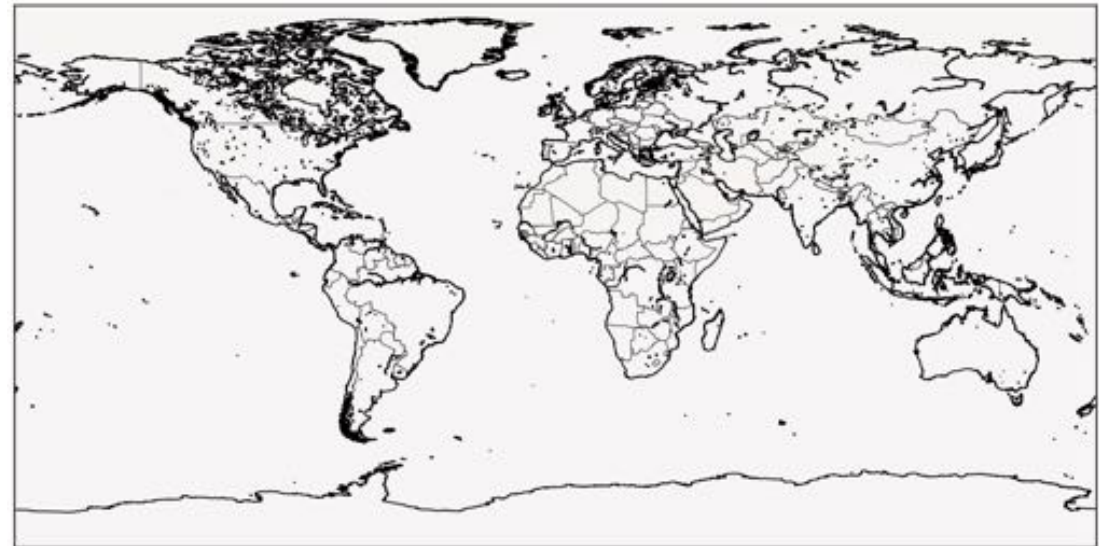


1x1



ACET / ppbv

Percentage Difference

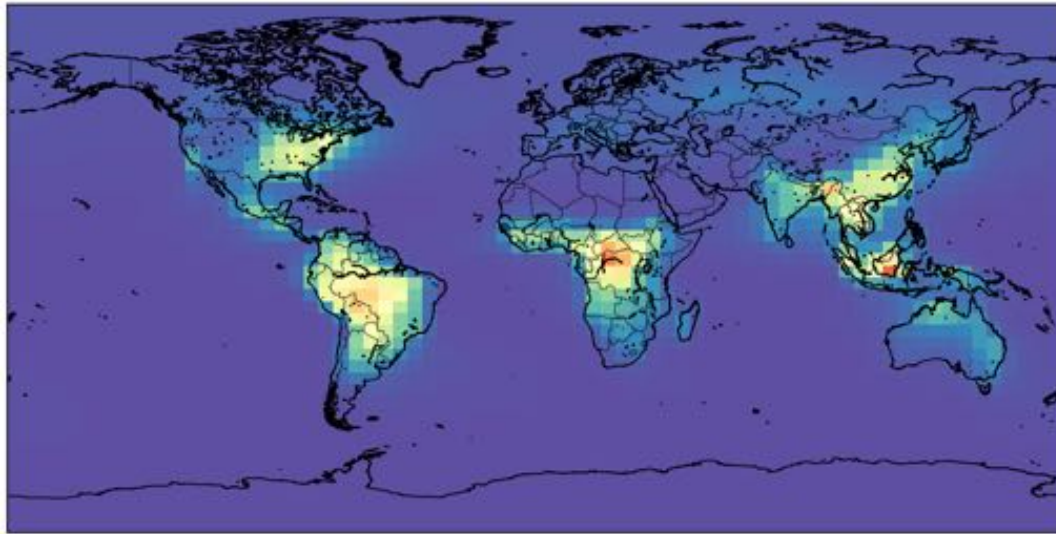


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

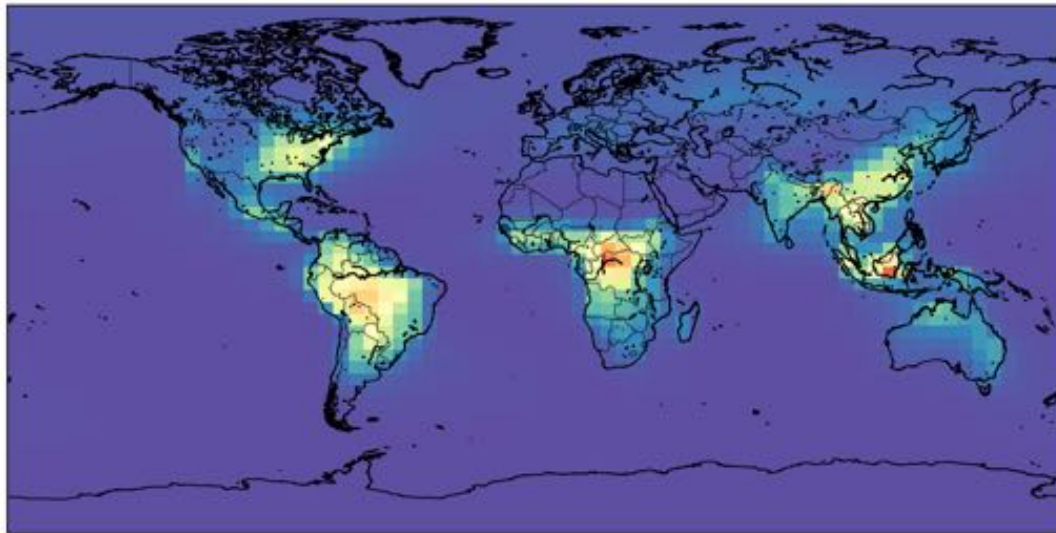
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

MEK

4x5

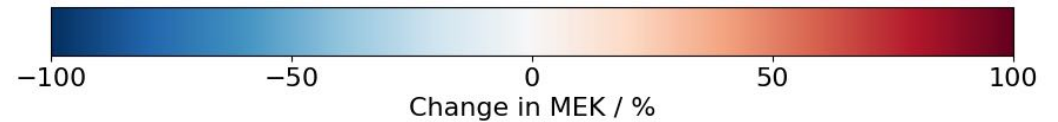
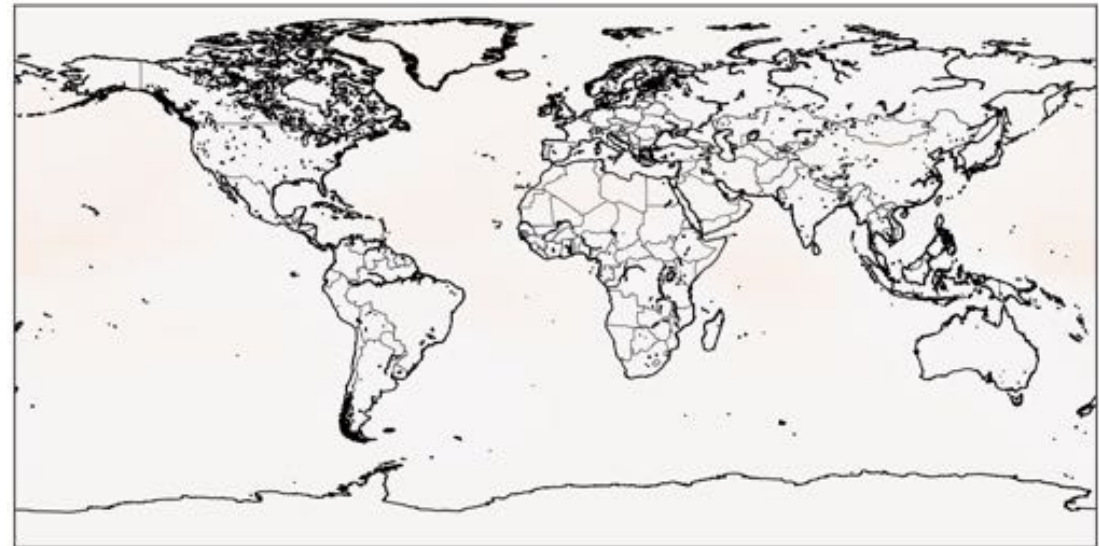


1x1



MEK / ppbv

Percentage Difference

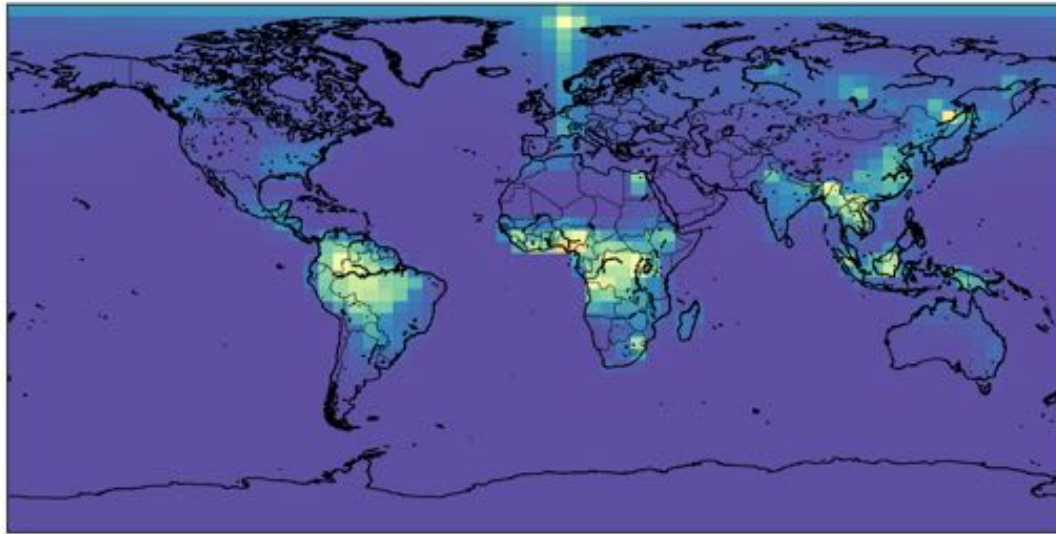


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

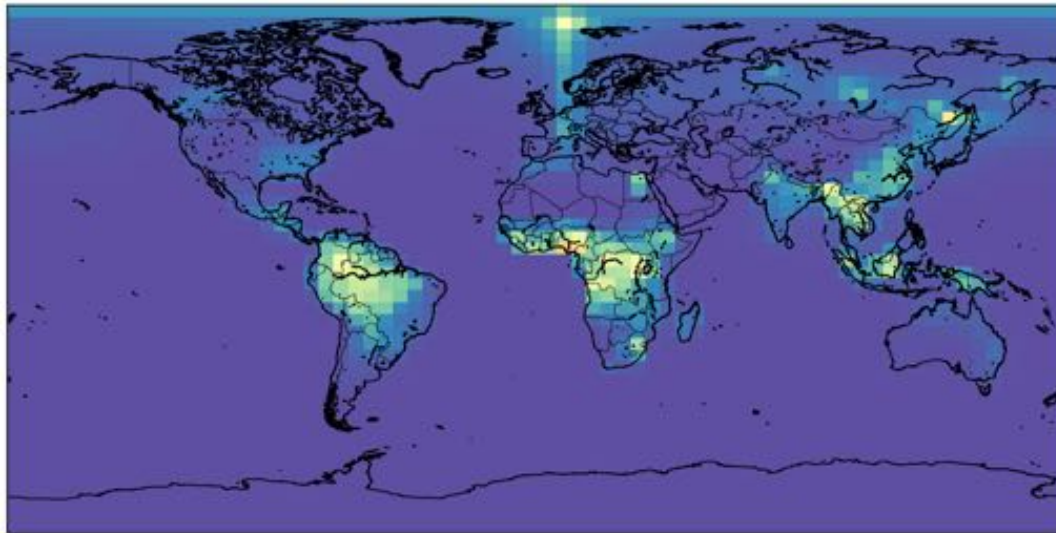
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

ALD2

4x5

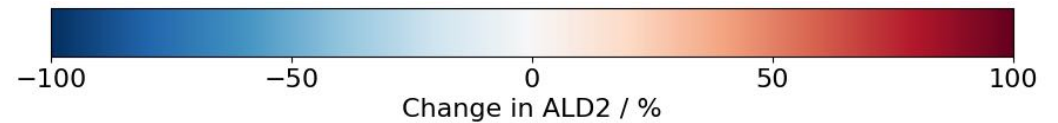
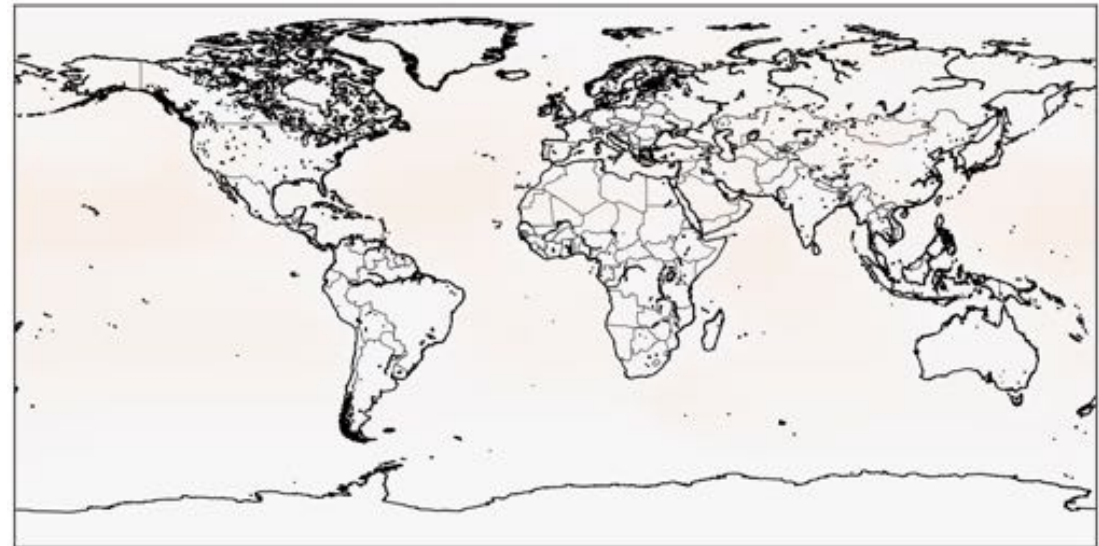


1x1



ALD2 / ppbv

Percentage Difference

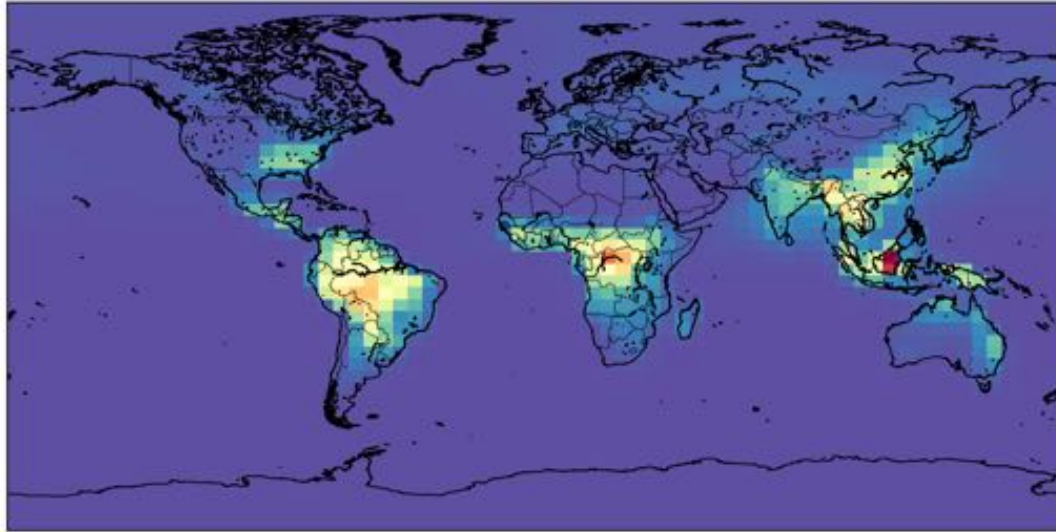


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

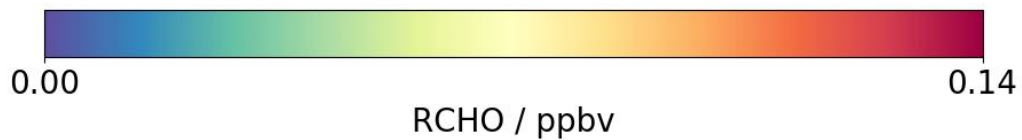
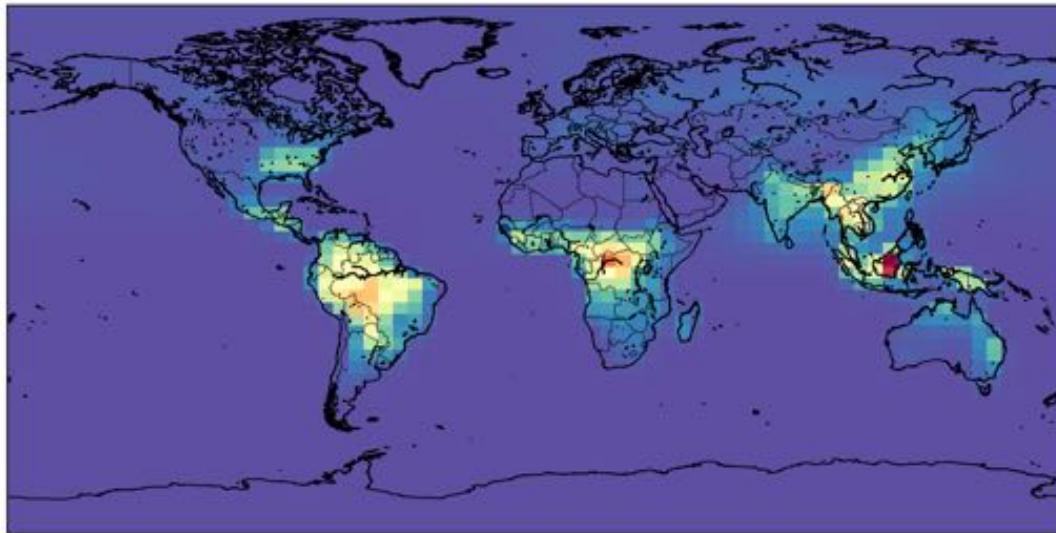
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

RCHO

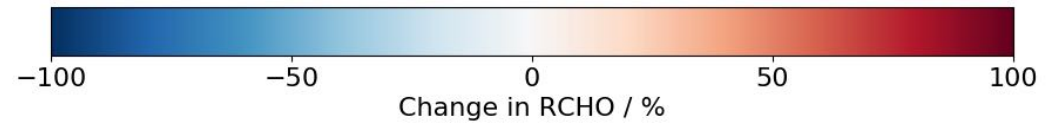
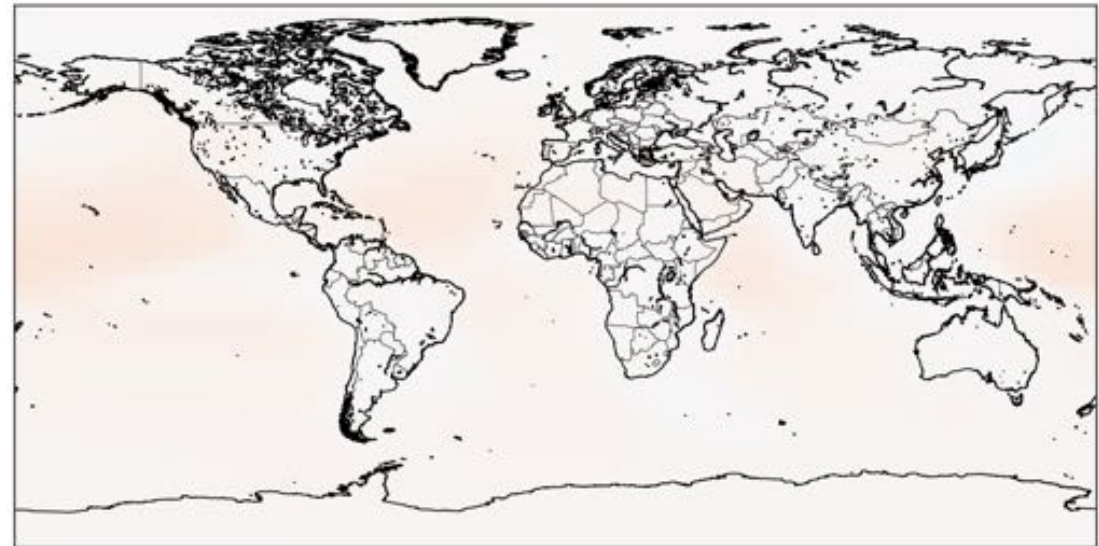
4x5



1x1



Percentage Difference

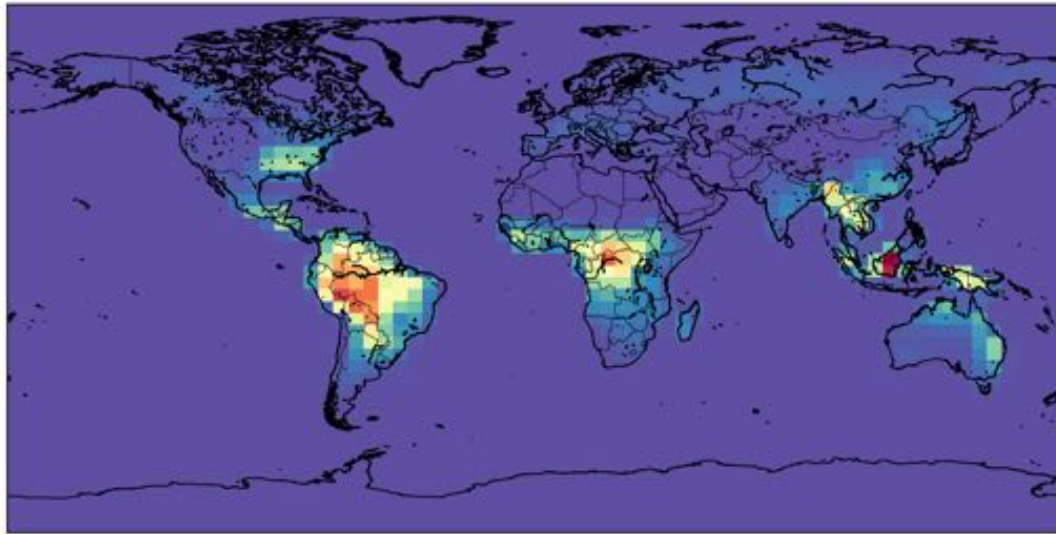


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

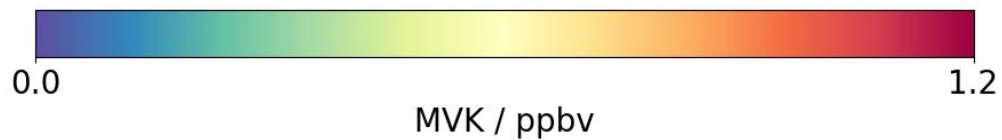
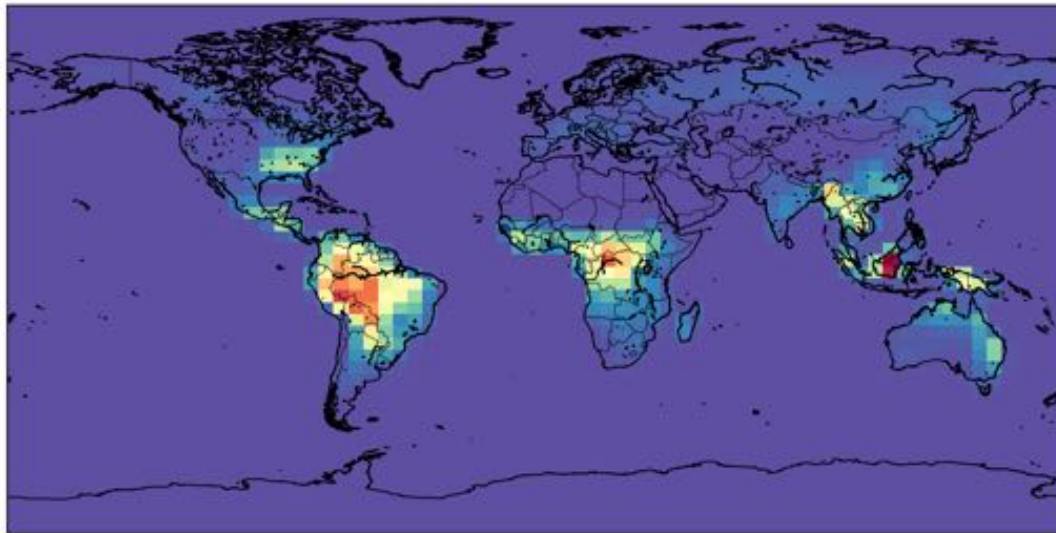
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

MVK

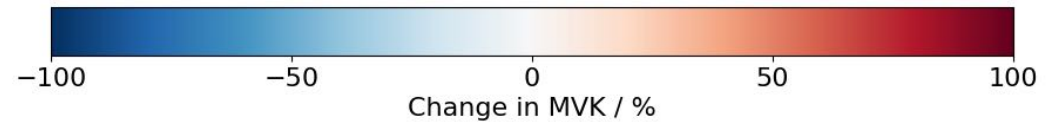
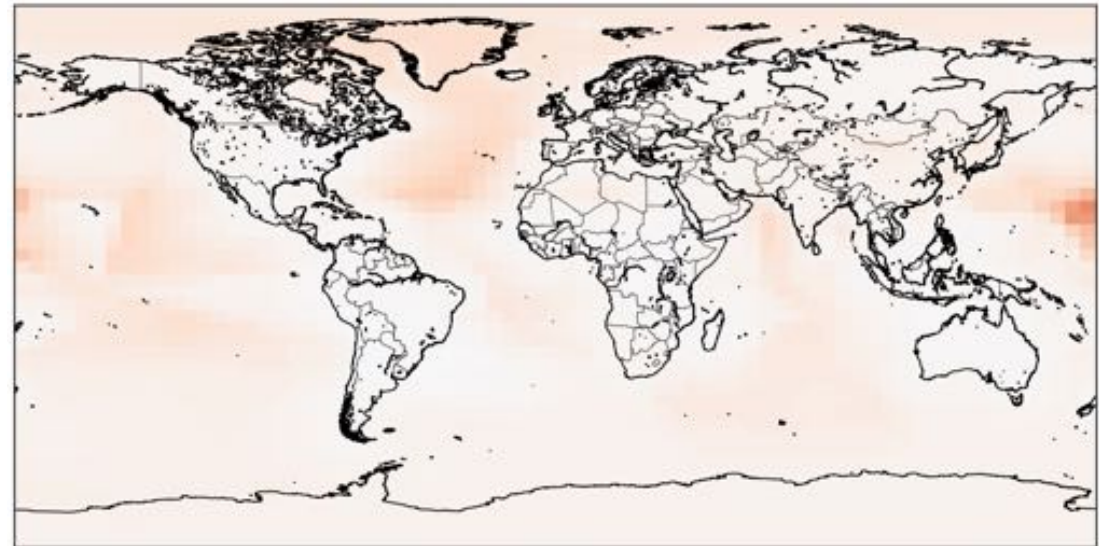
4x5



1x1



Percentage Difference

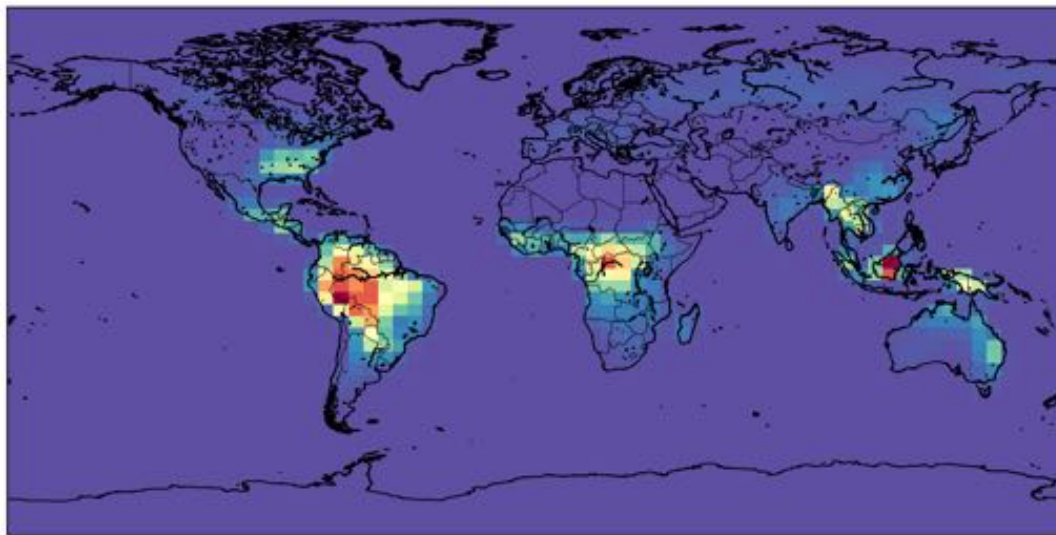


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

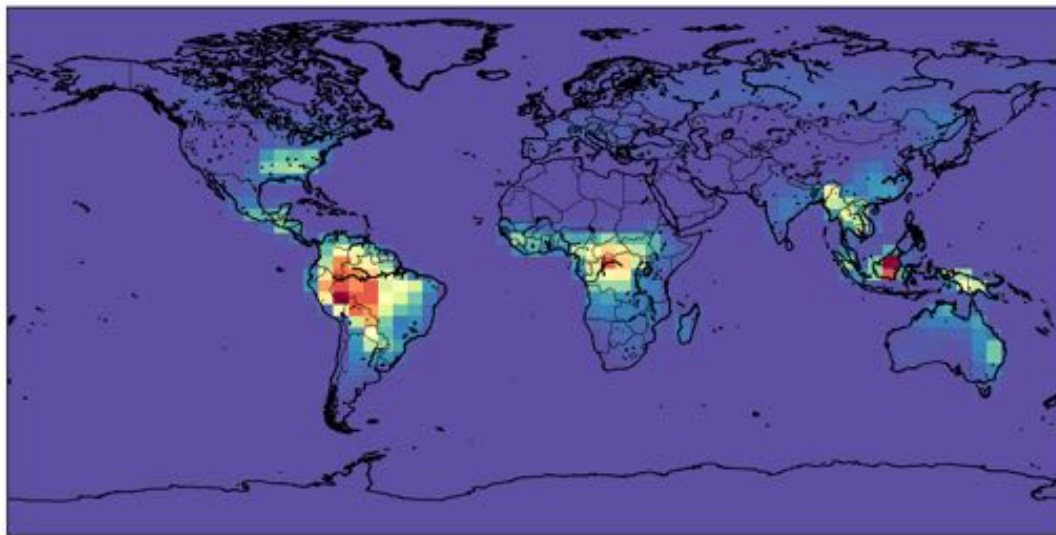
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

MACR

4x5

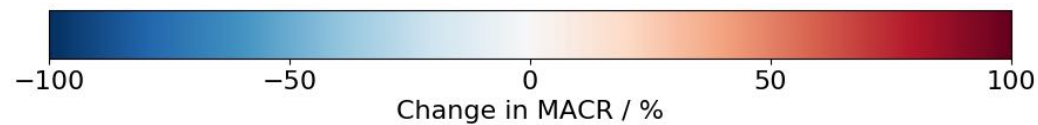
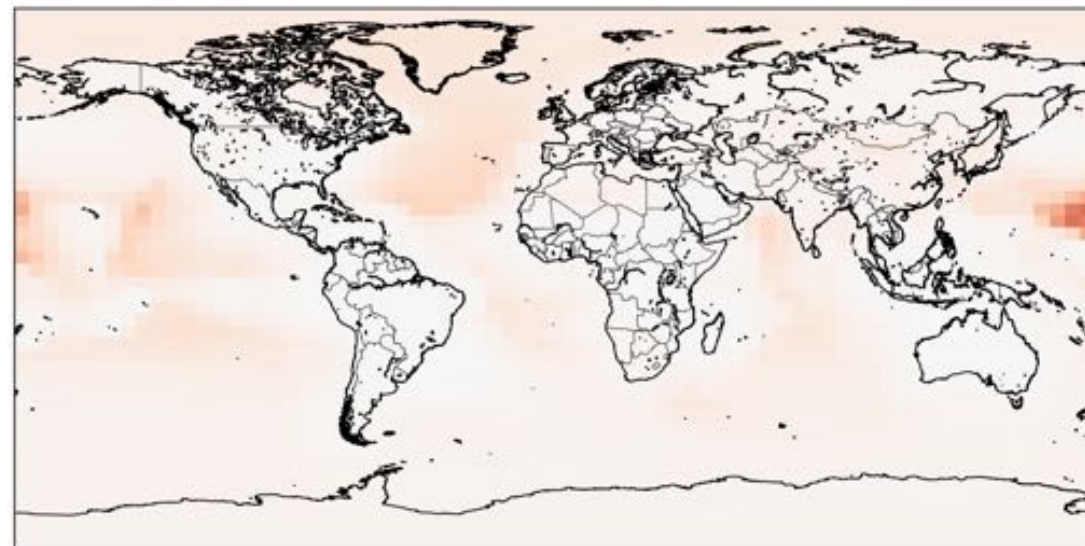


1x1



MACR / ppbv

Percentage Difference

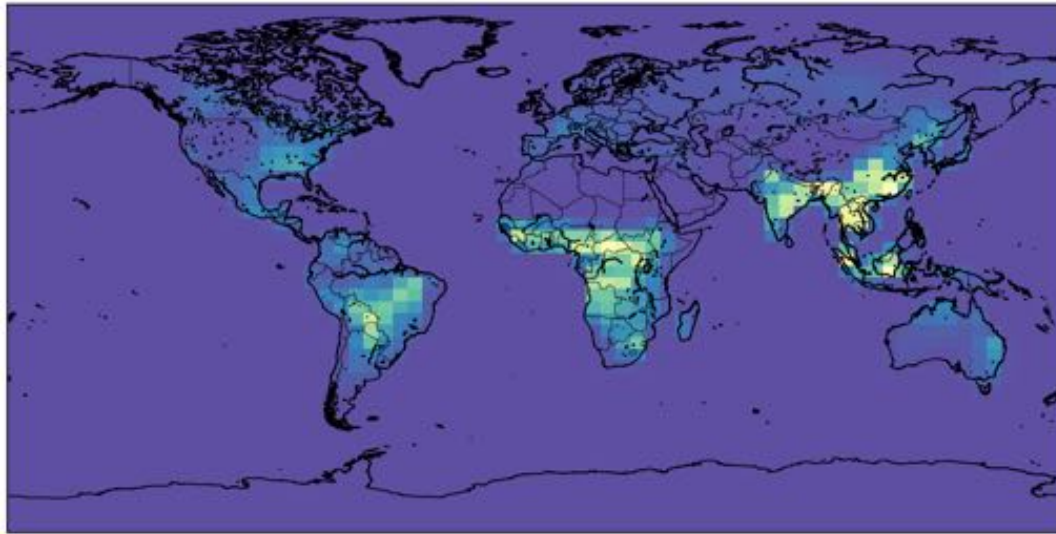


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

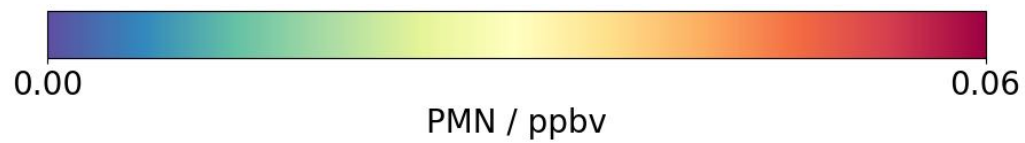
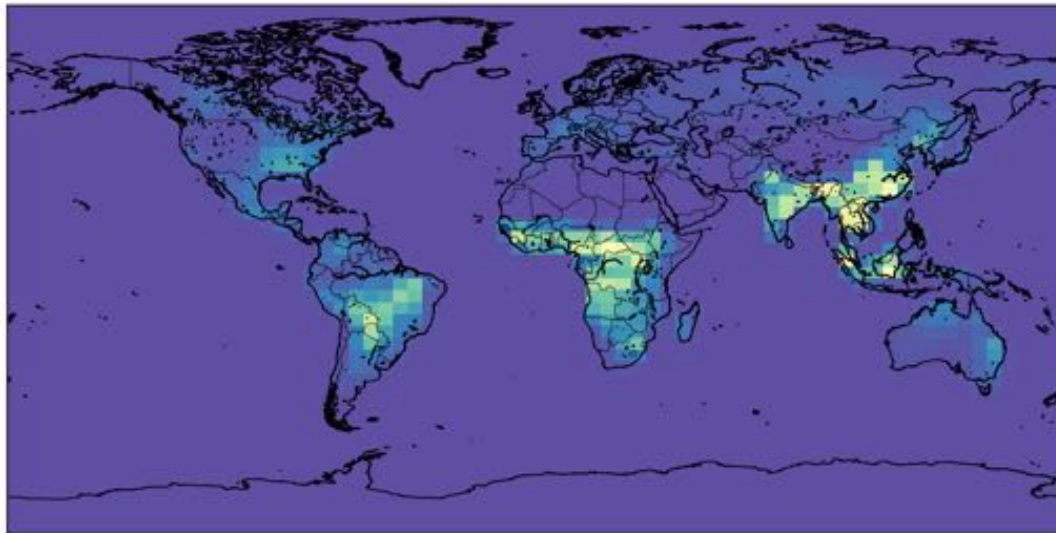
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

PMN

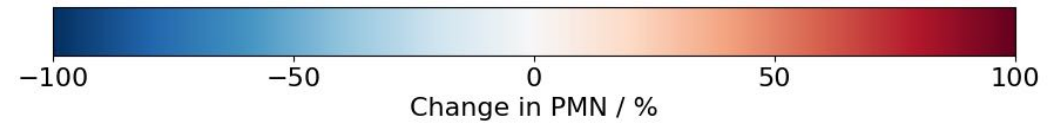
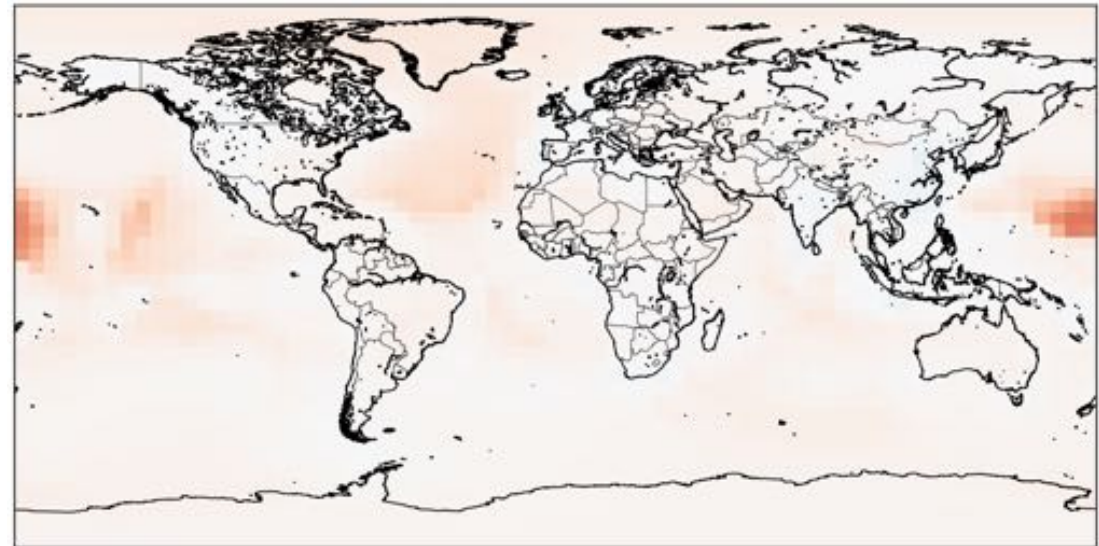
4x5



1x1



Percentage Difference

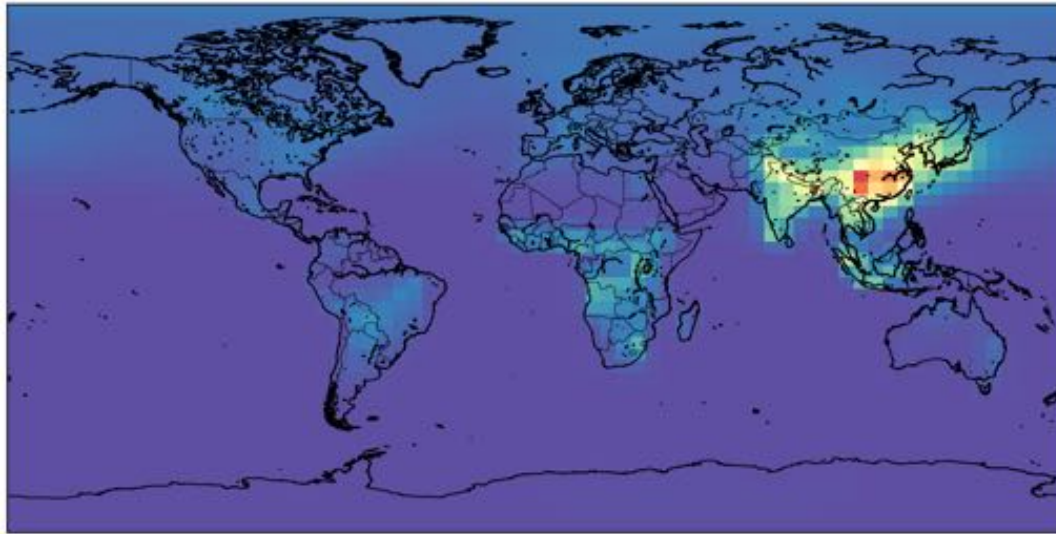


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

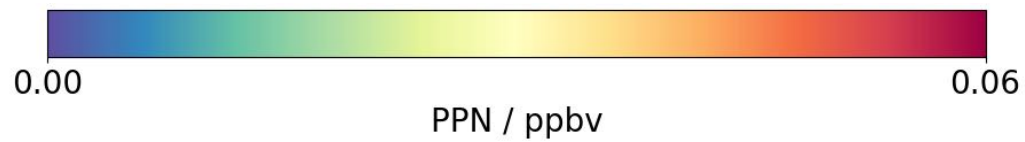
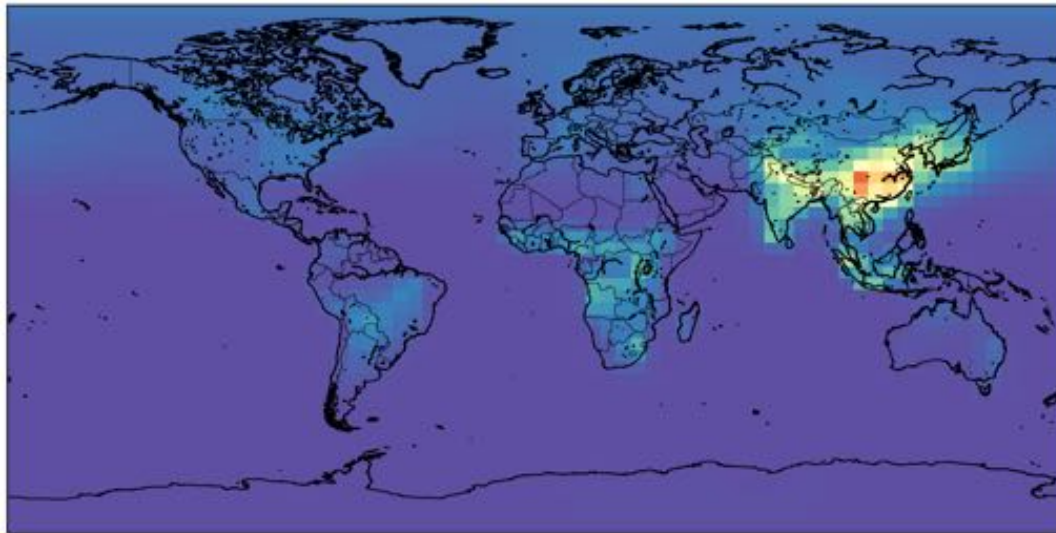
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

PPN

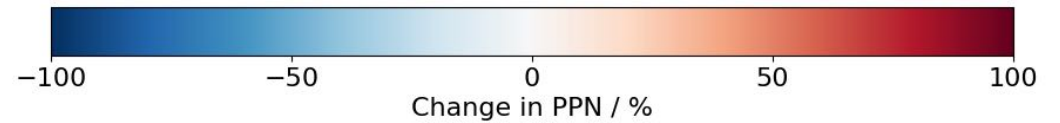
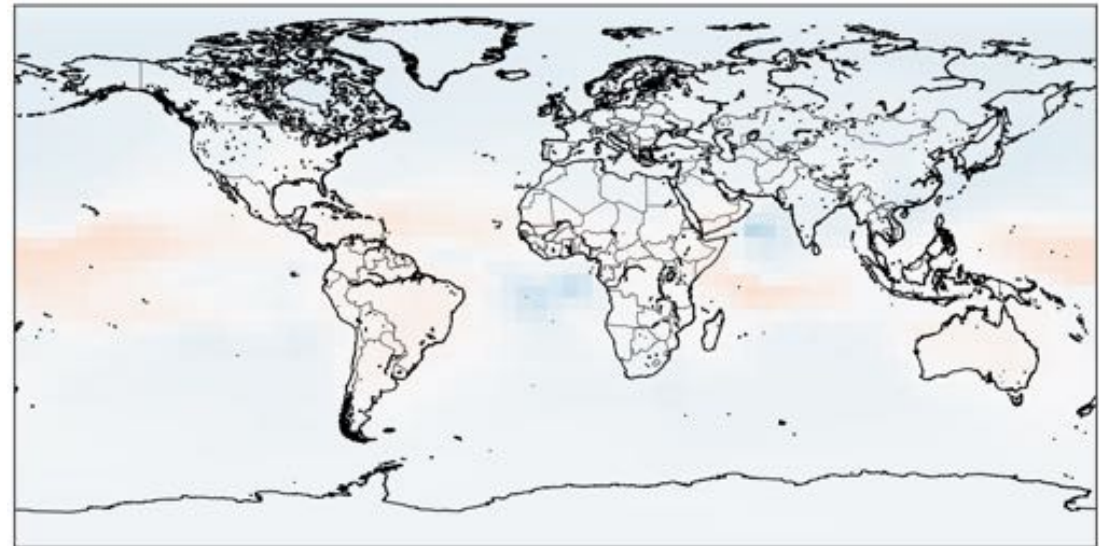
4x5



1x1



Percentage Difference

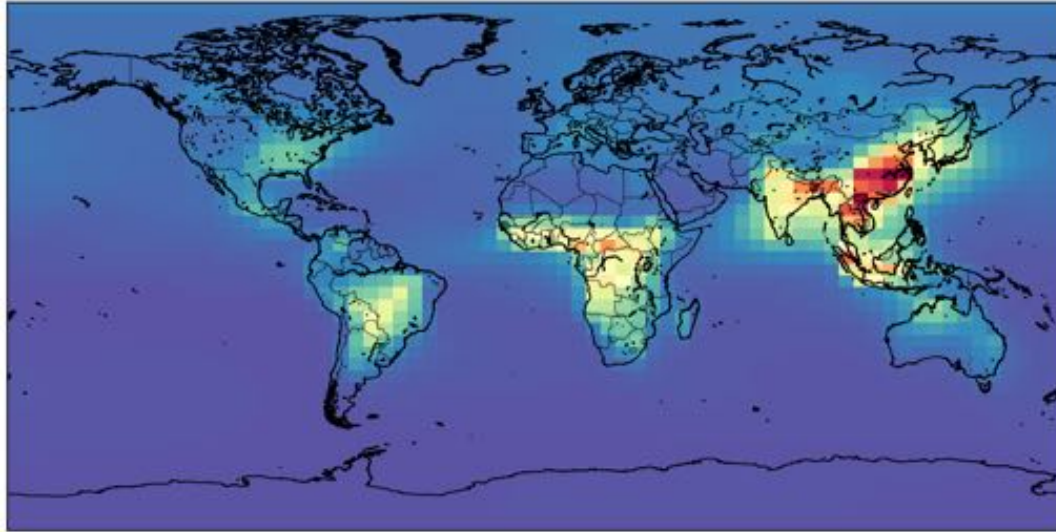


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

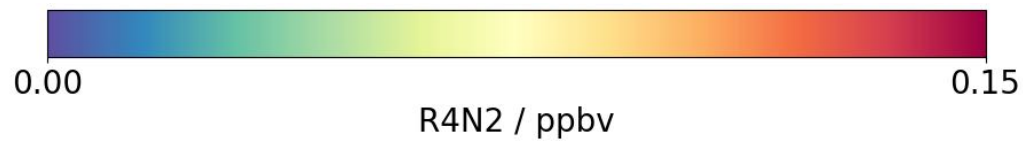
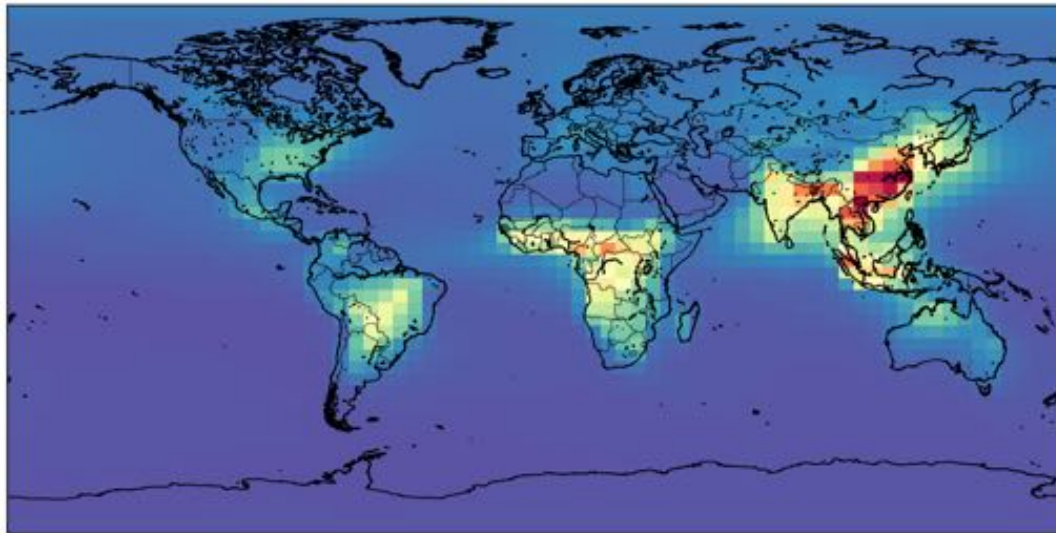
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

R4N2

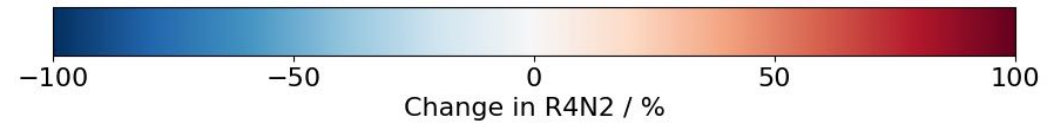
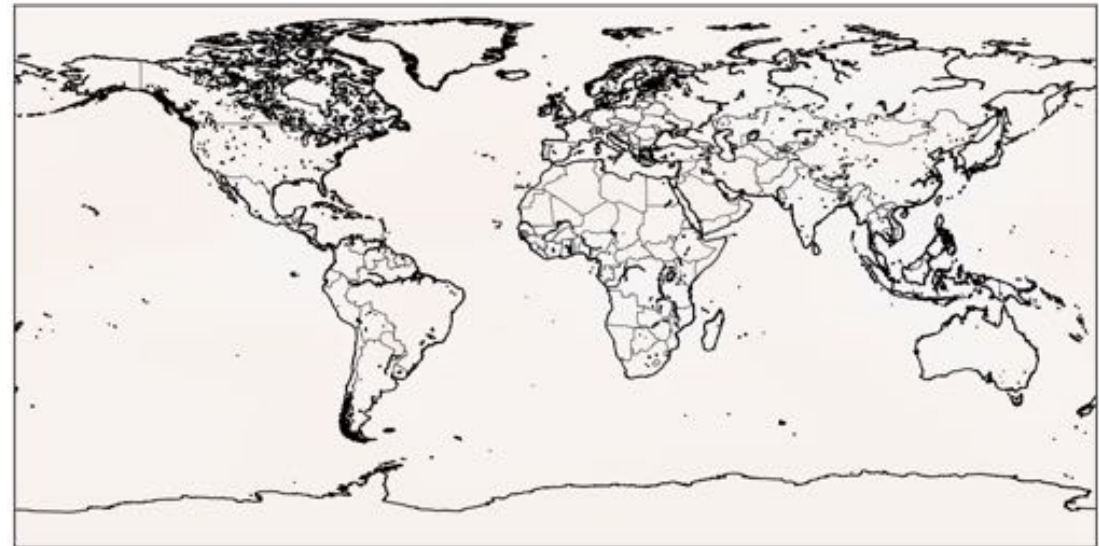
4x5



1x1



Percentage Difference

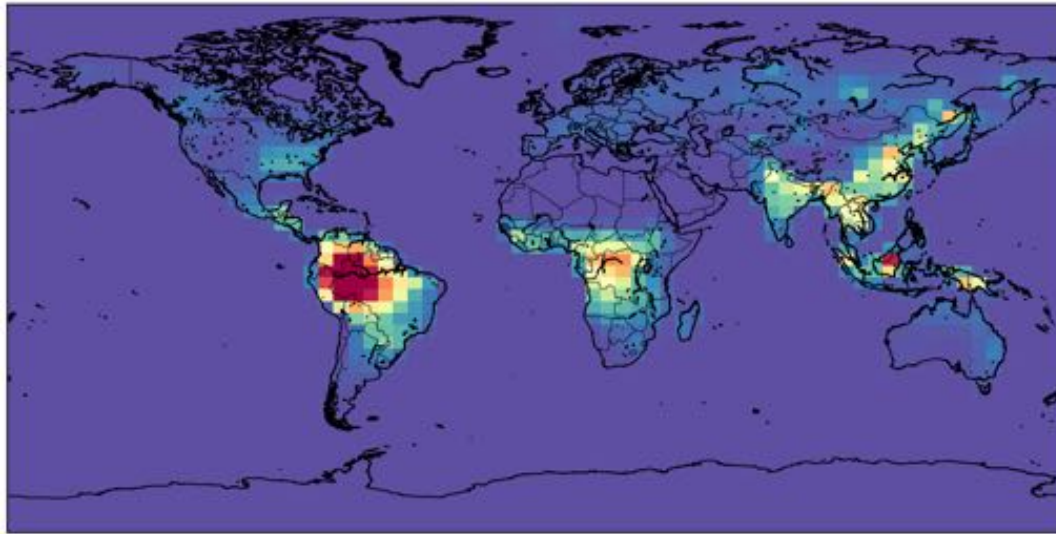


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

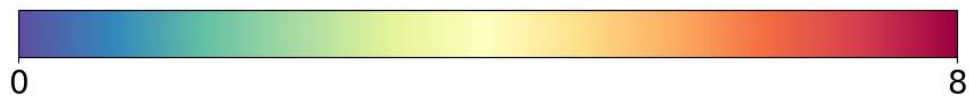
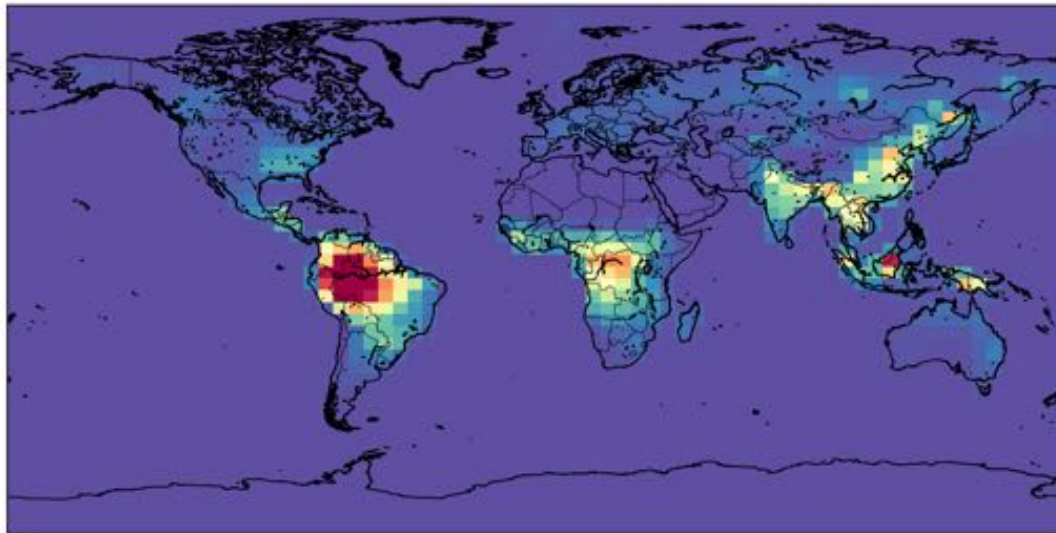
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

PRPE

4x5

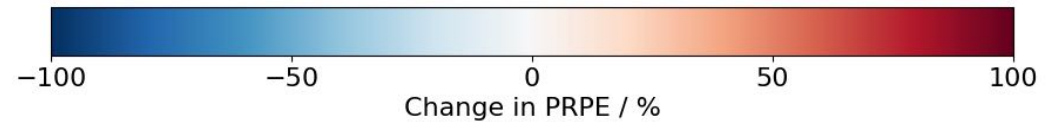
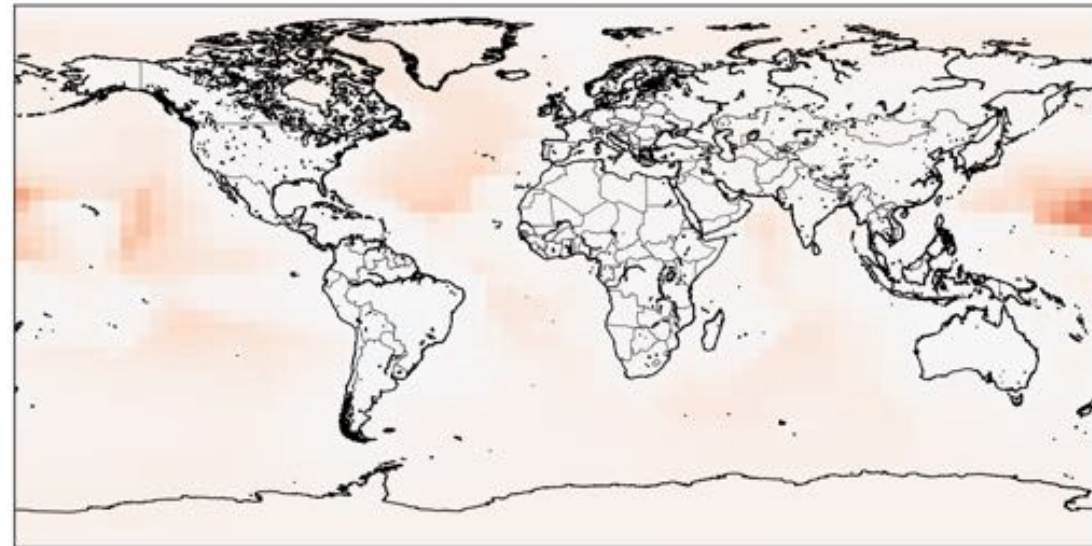


1x1



PRPE / ppbv

Percentage Difference

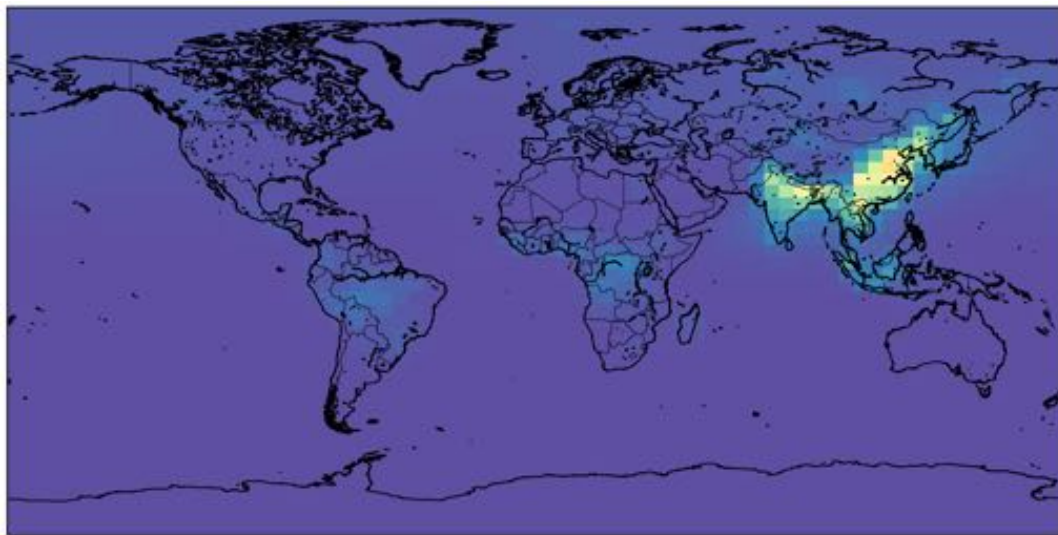


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

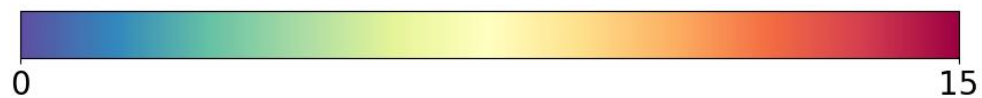
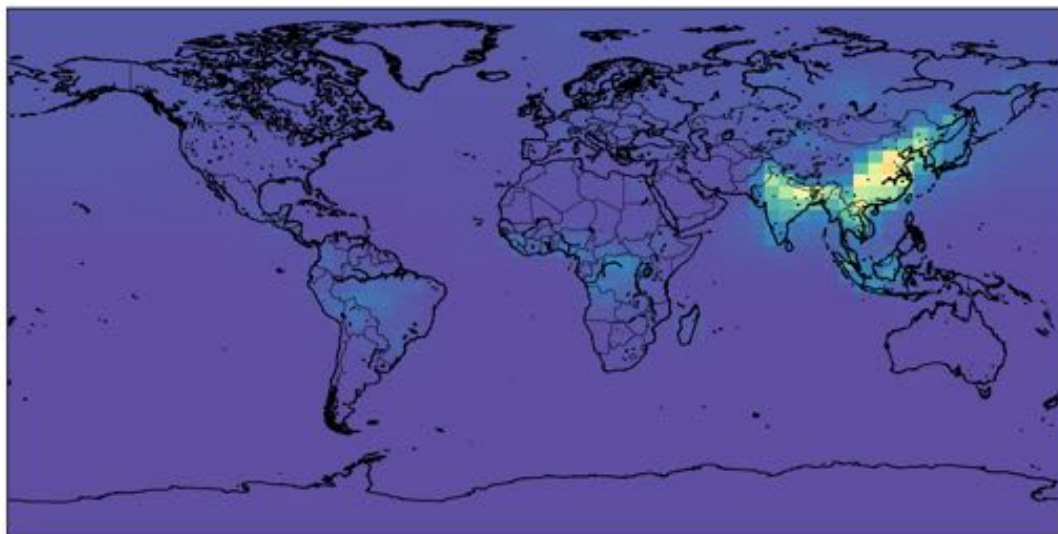
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

C3H8

4x5

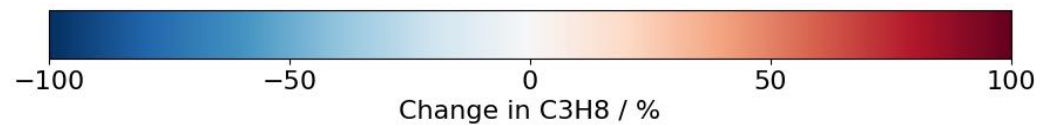
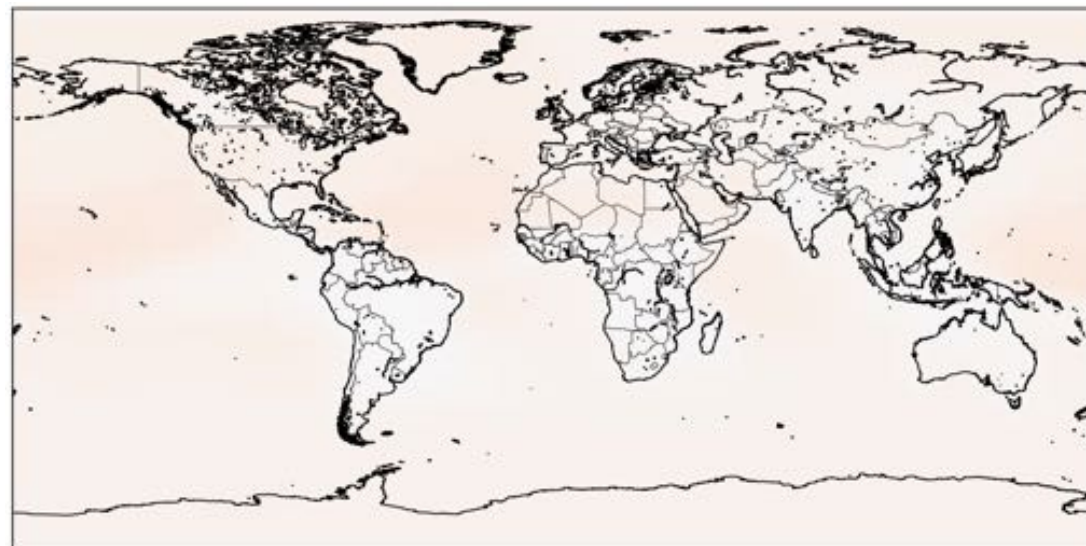


1x1



C3H8 / ppbv

Percentage Difference

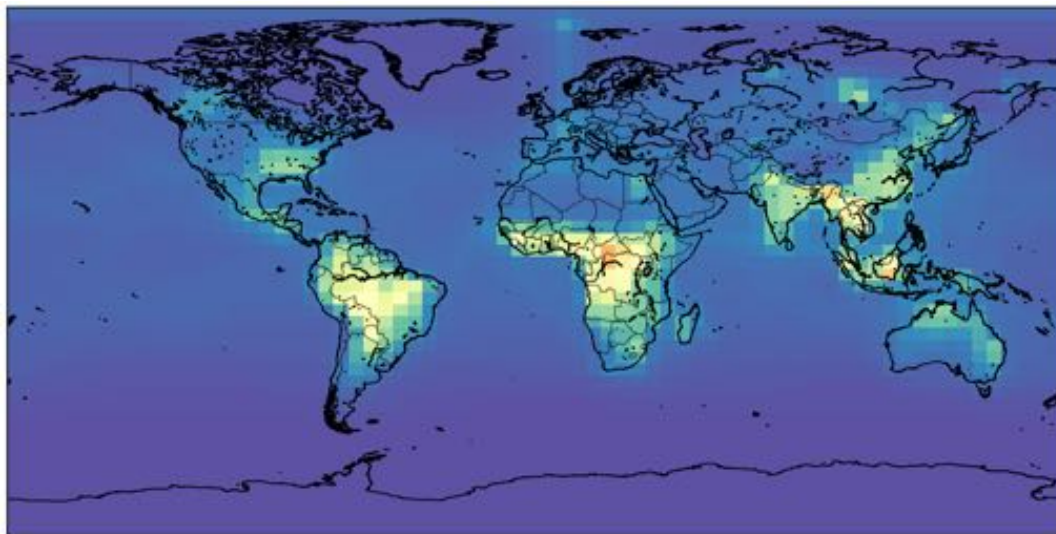


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

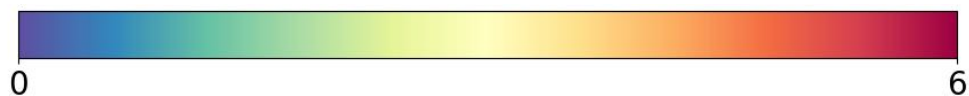
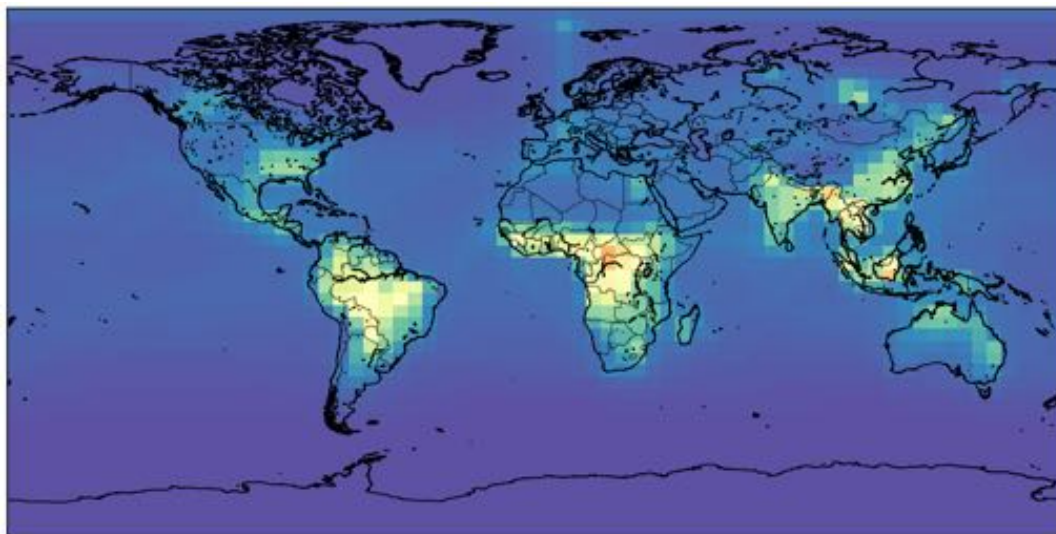
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

CH₂O

4x5

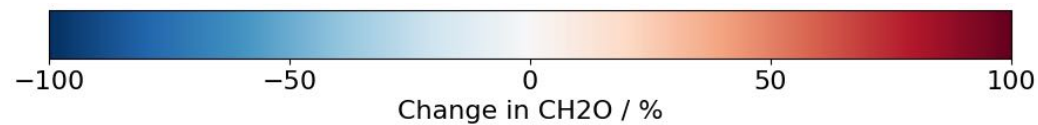
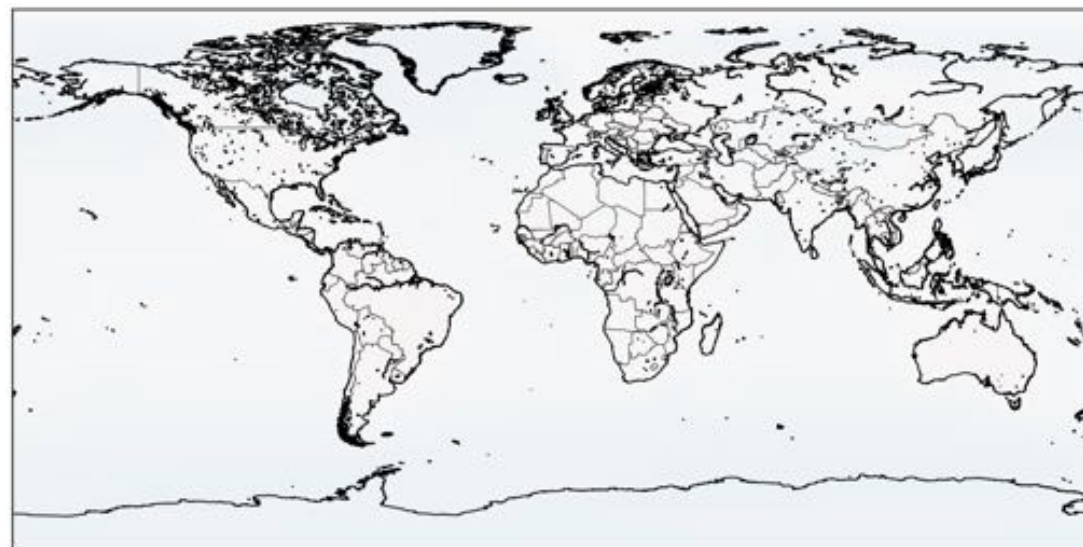


1x1



CH₂O / ppbv

Percentage Difference

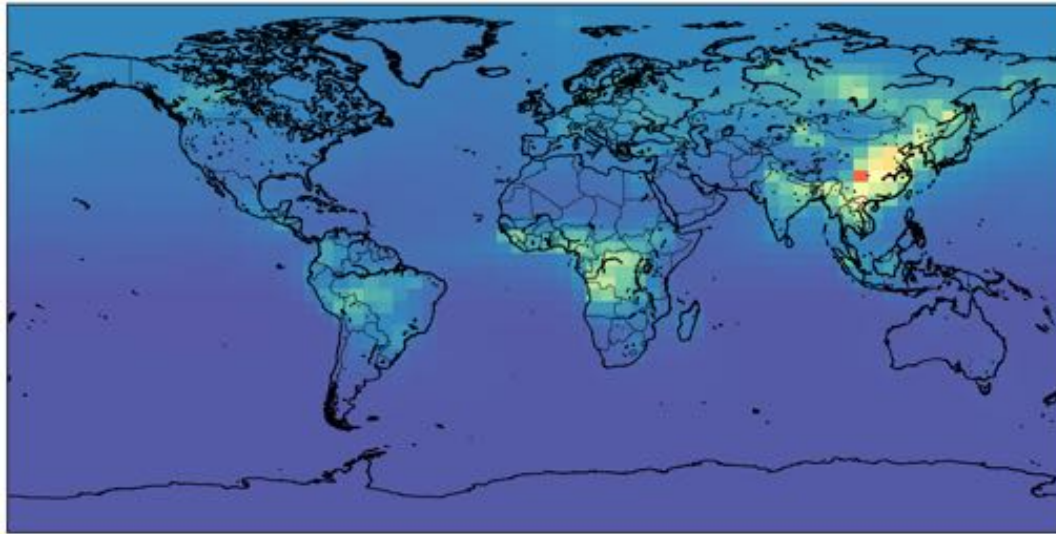


Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

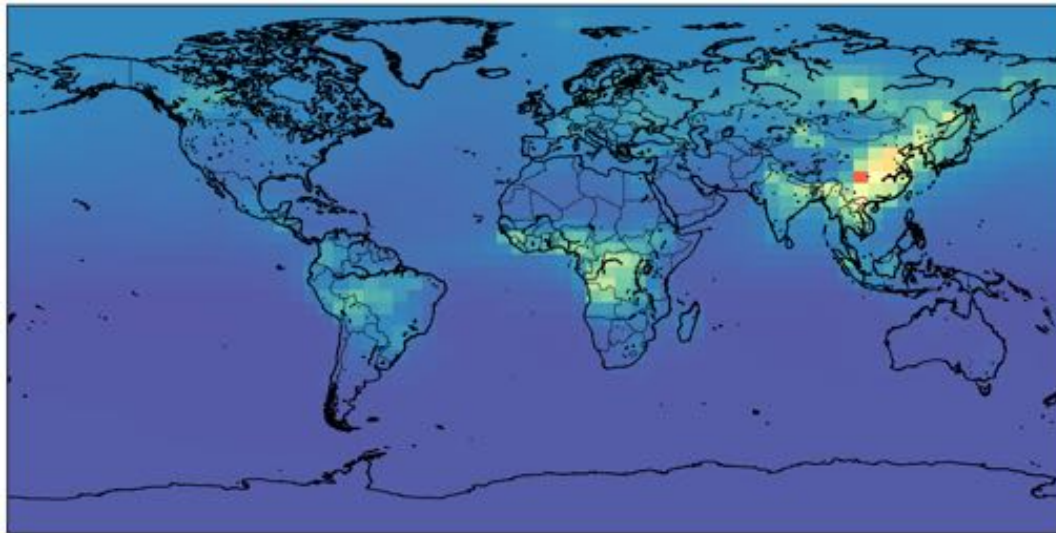
Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions

C2H6

4x5

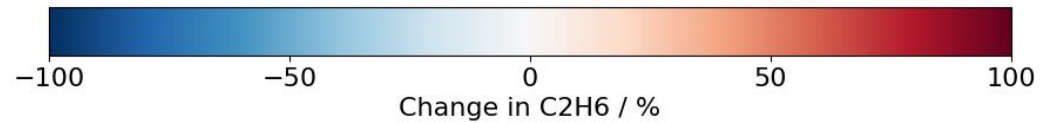
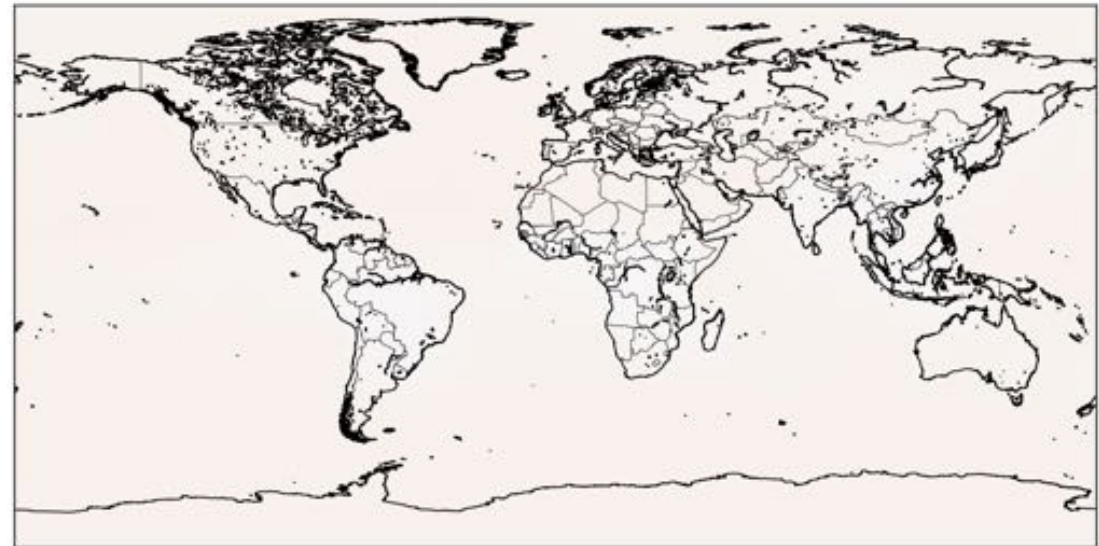


1x1



C2H6 / ppbv

Percentage Difference

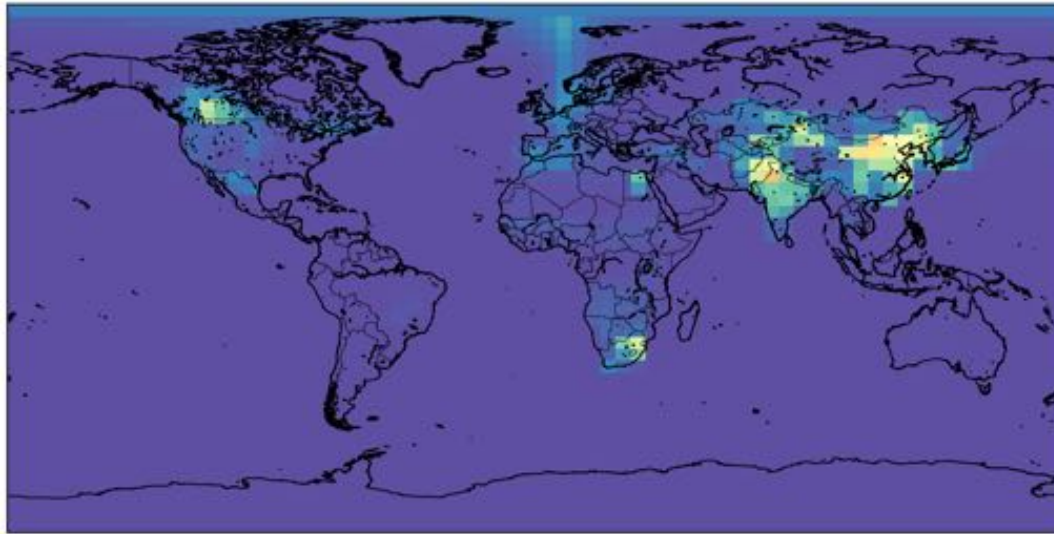


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

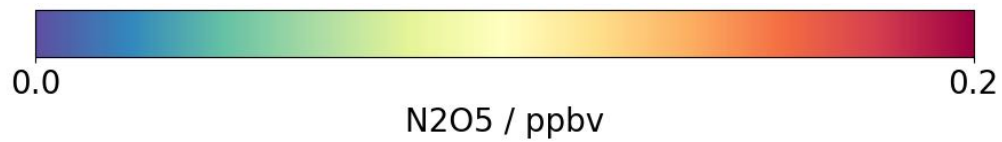
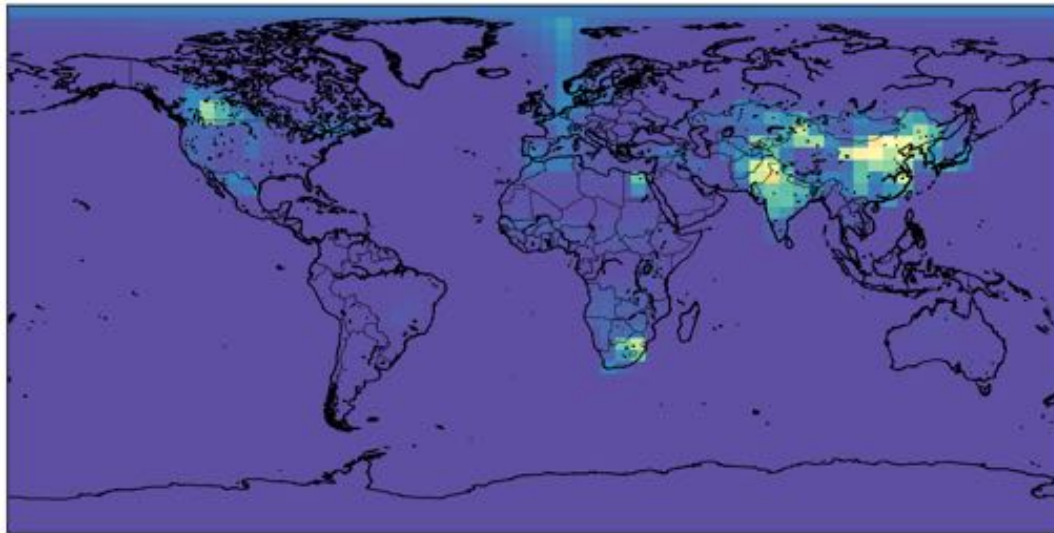
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

N2O5

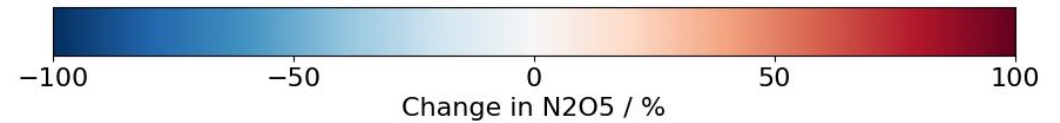
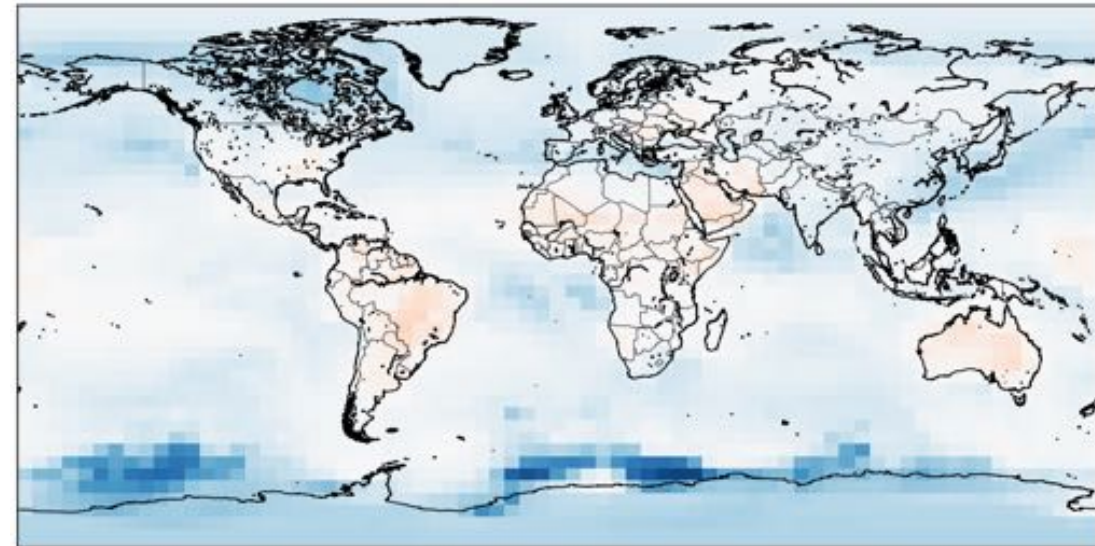
4x5



1x1



Percentage Difference

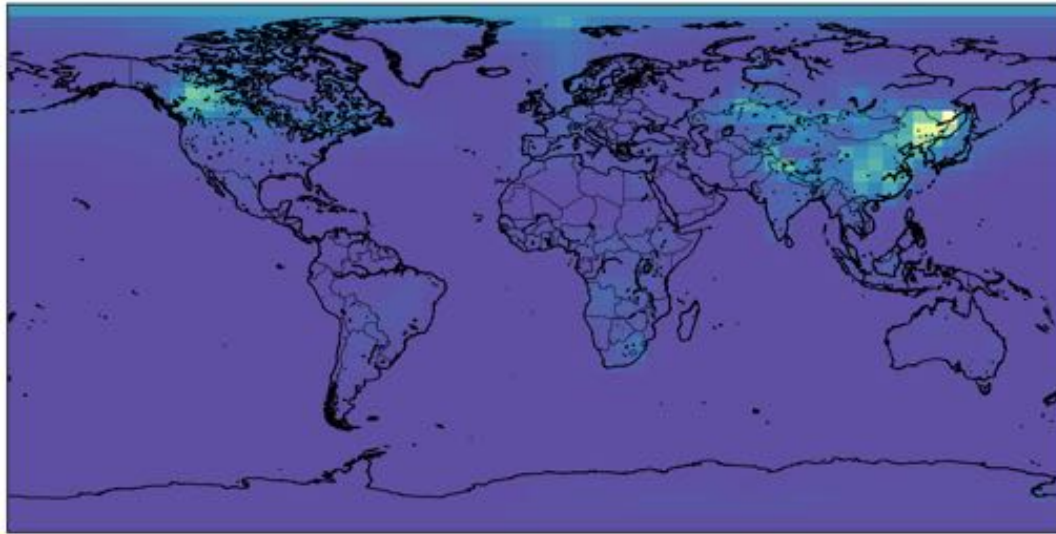


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

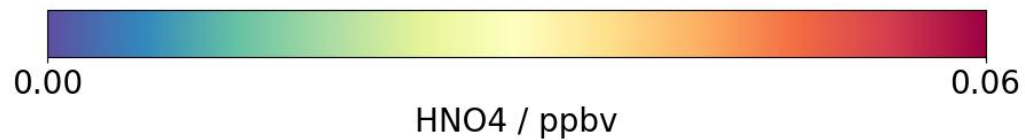
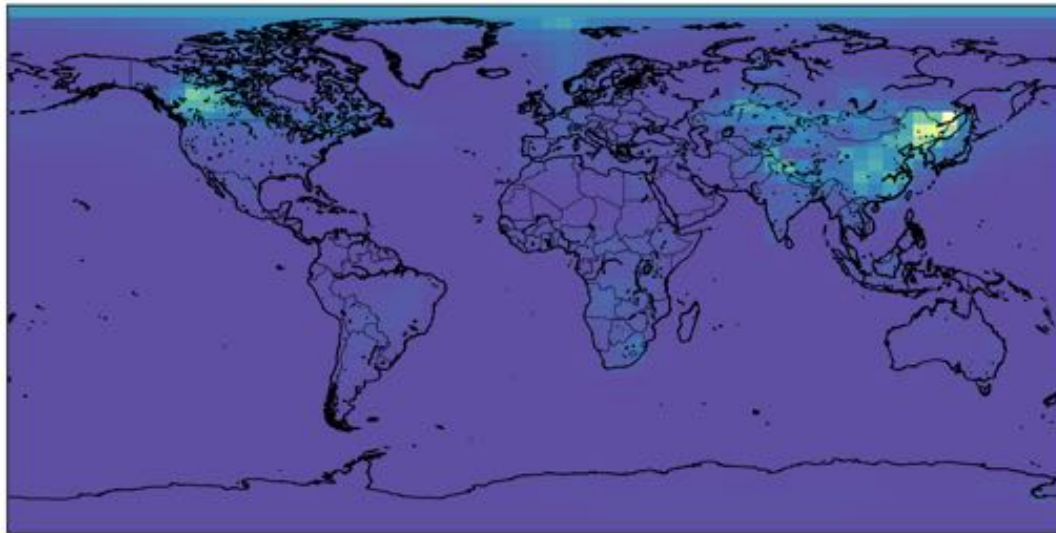
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

HNO₄

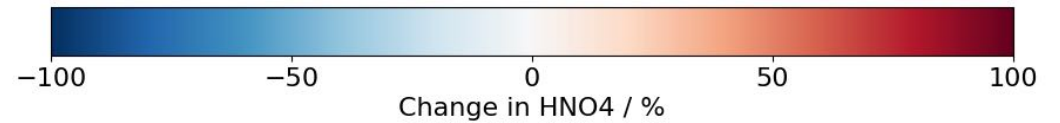
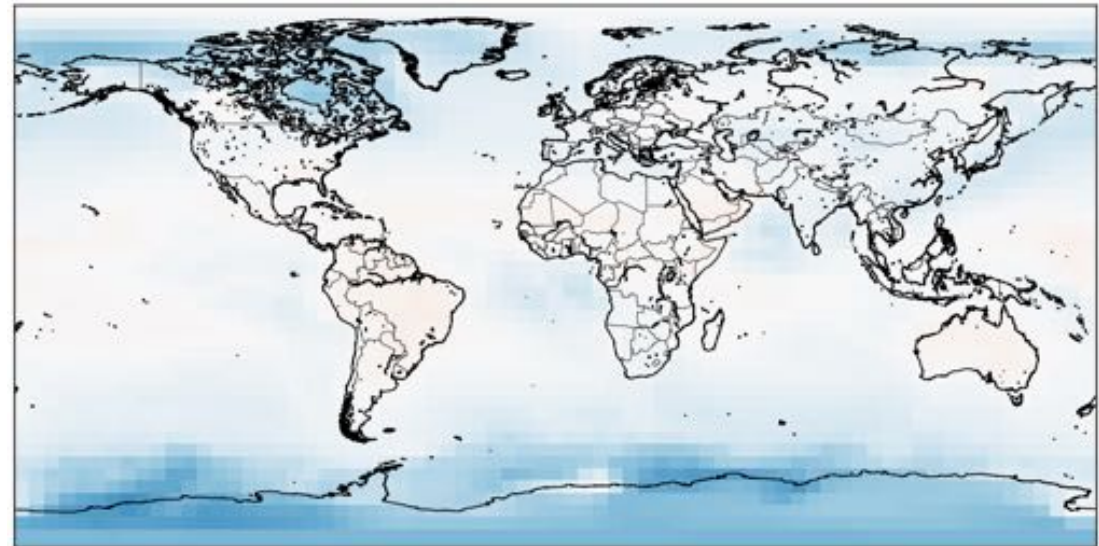
4x5



1x1



Percentage Difference

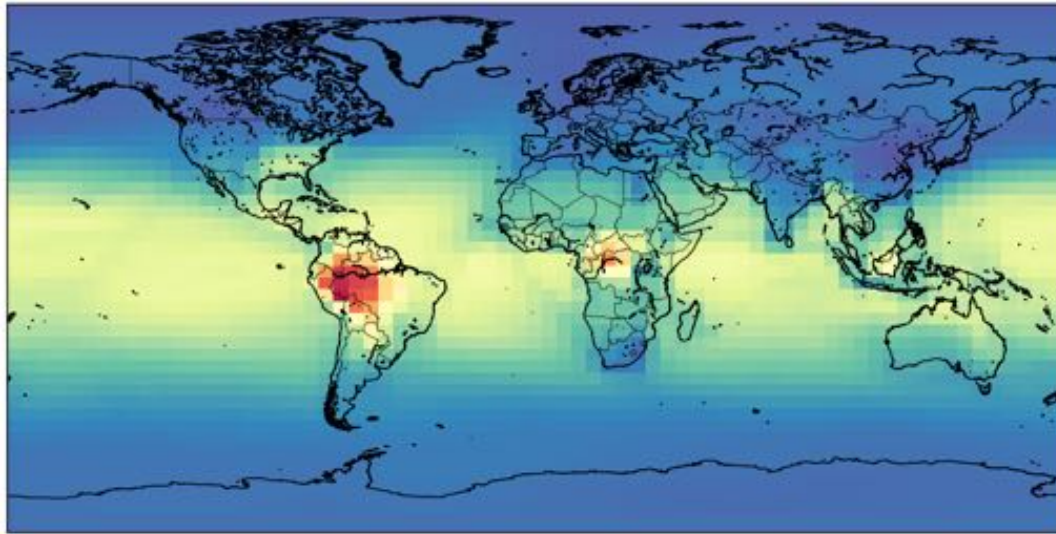


Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

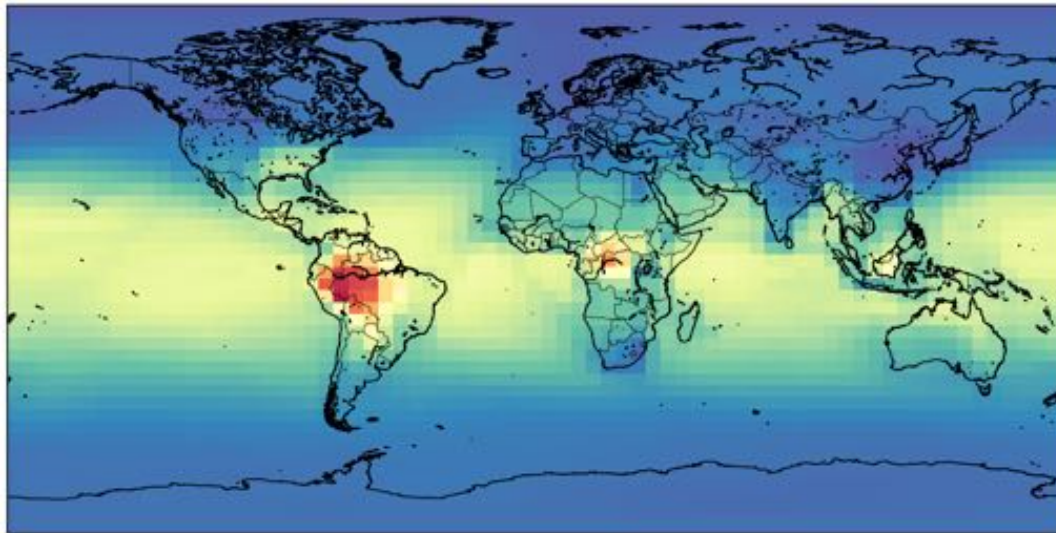
Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions

MP

4x5

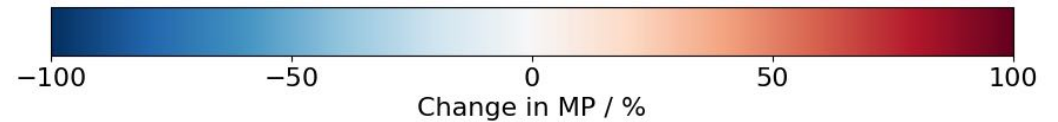
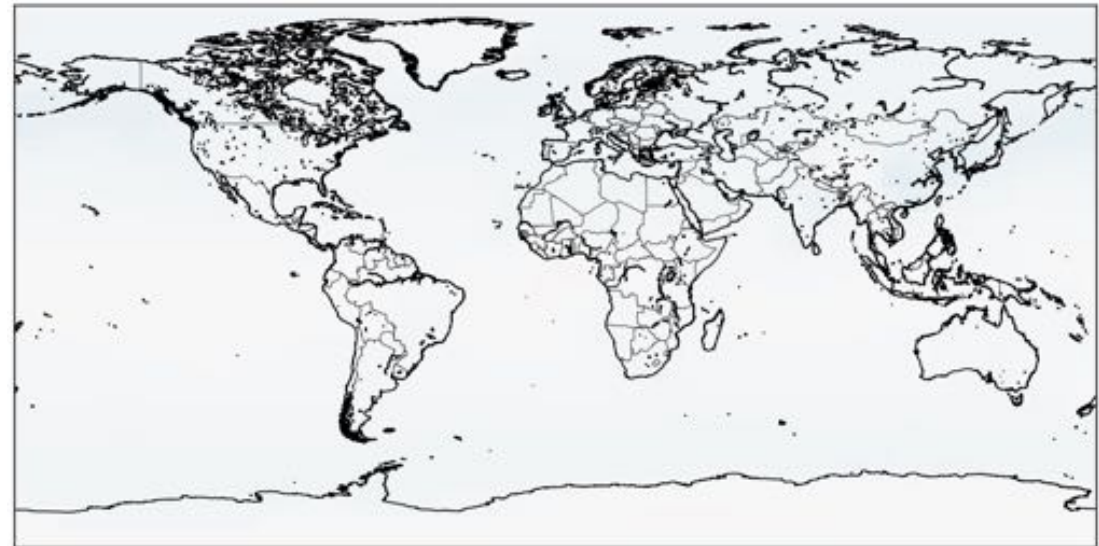


1x1



MP / ppbv

Percentage Difference

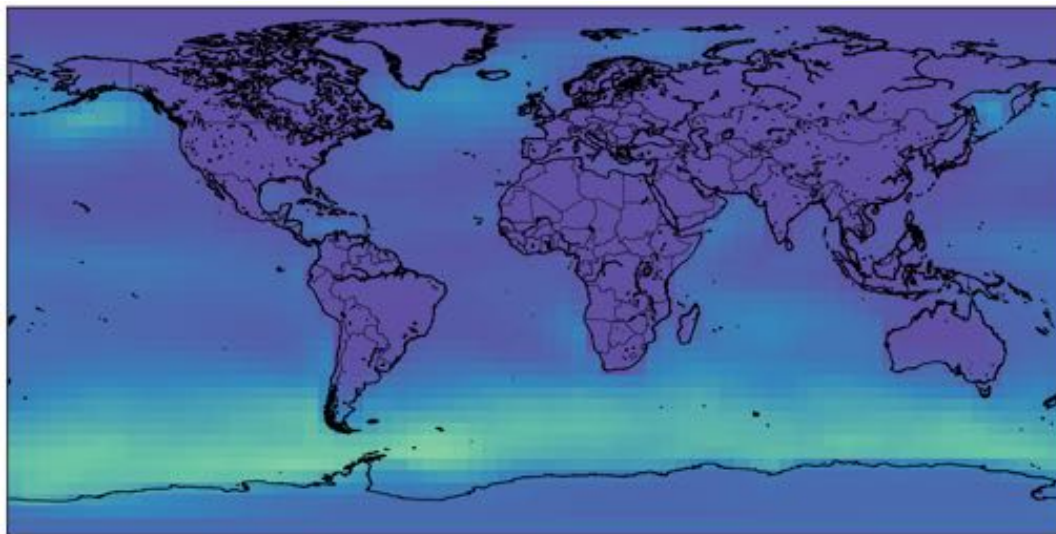


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

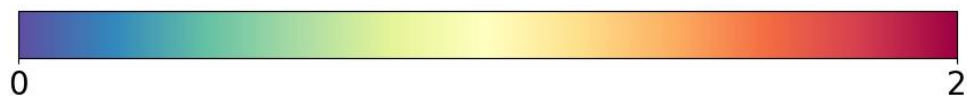
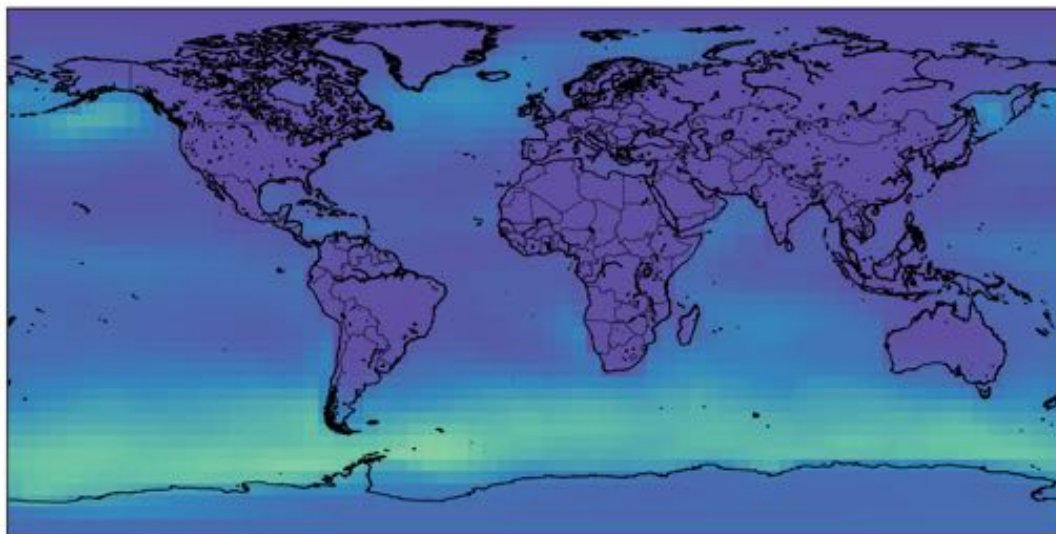
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

DMS

4x5

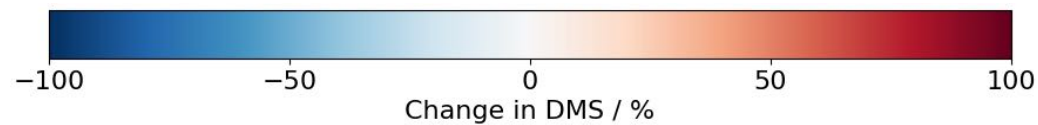
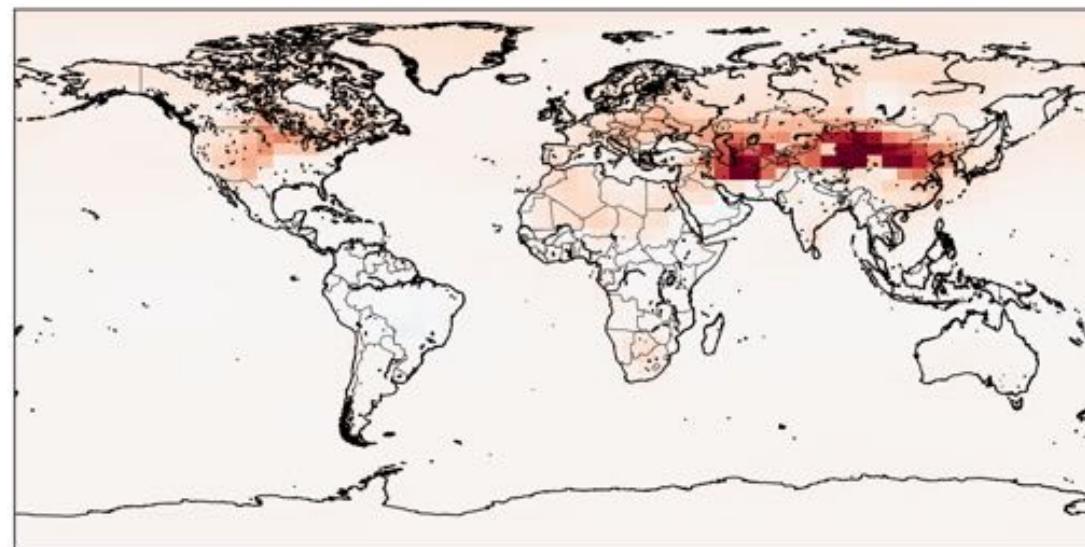


1x1



DMS / ppbv

Percentage Difference

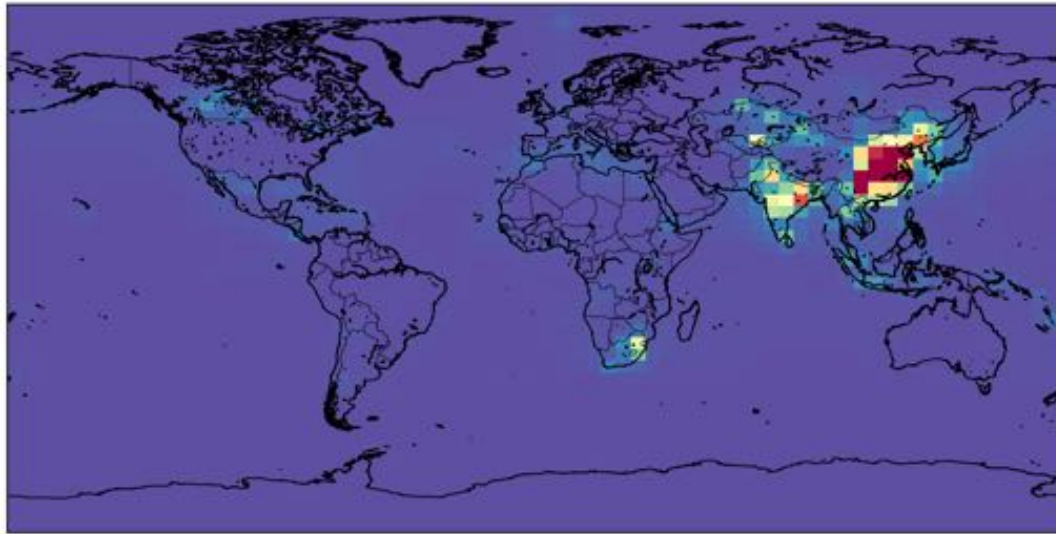


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

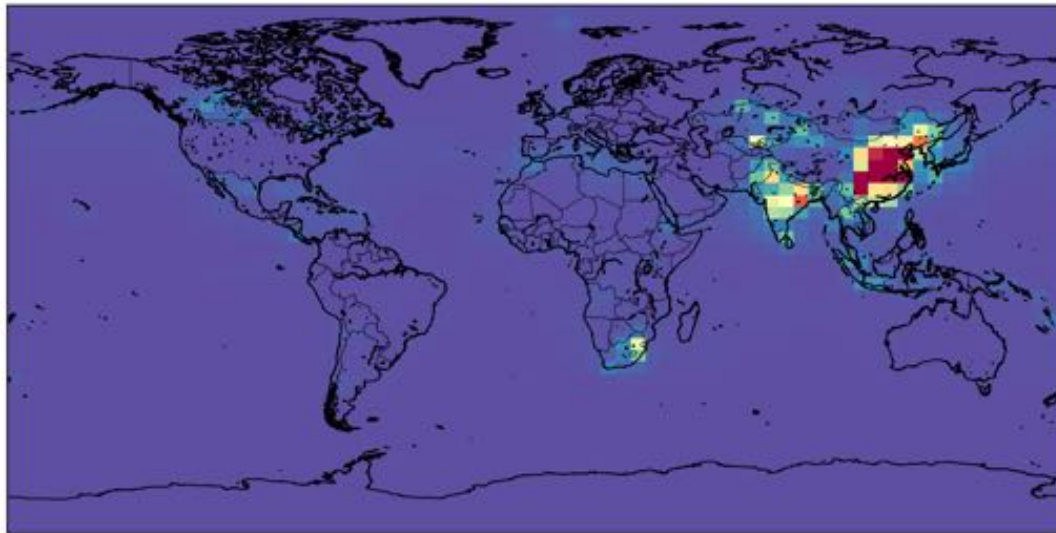
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

SO₂

4x5

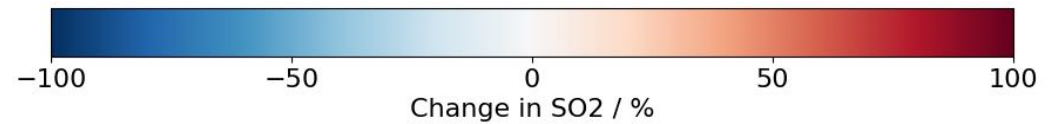
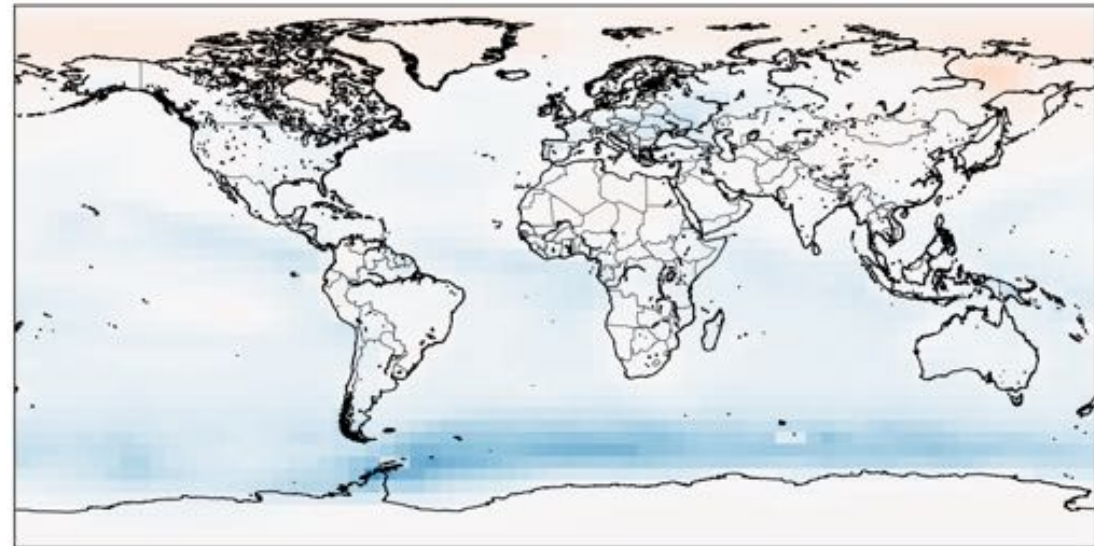


1x1



SO₂ / ppbv

Percentage Difference

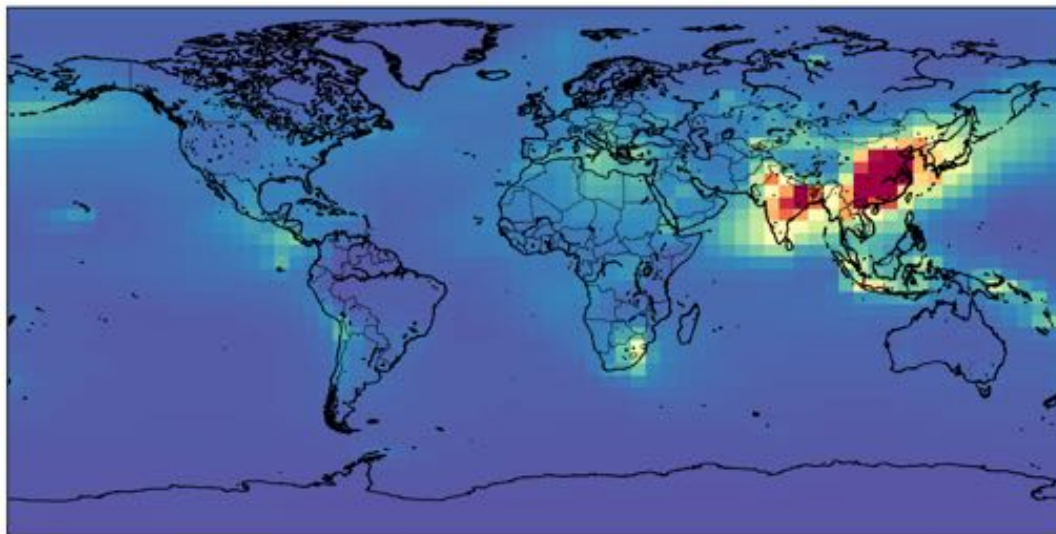


Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

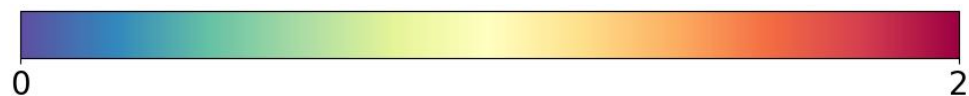
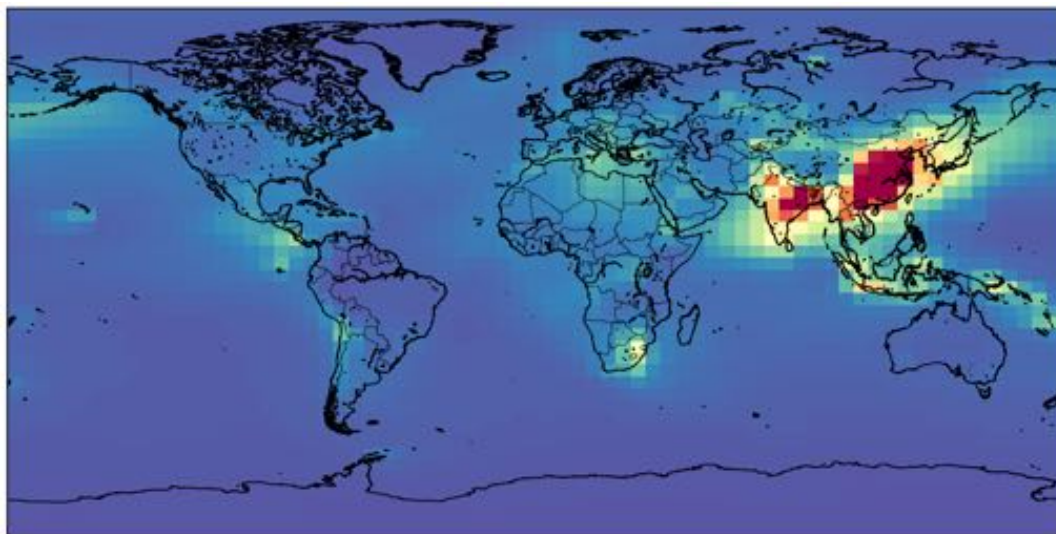
Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions

SO4

4x5

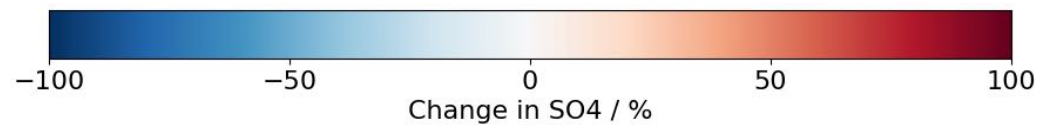
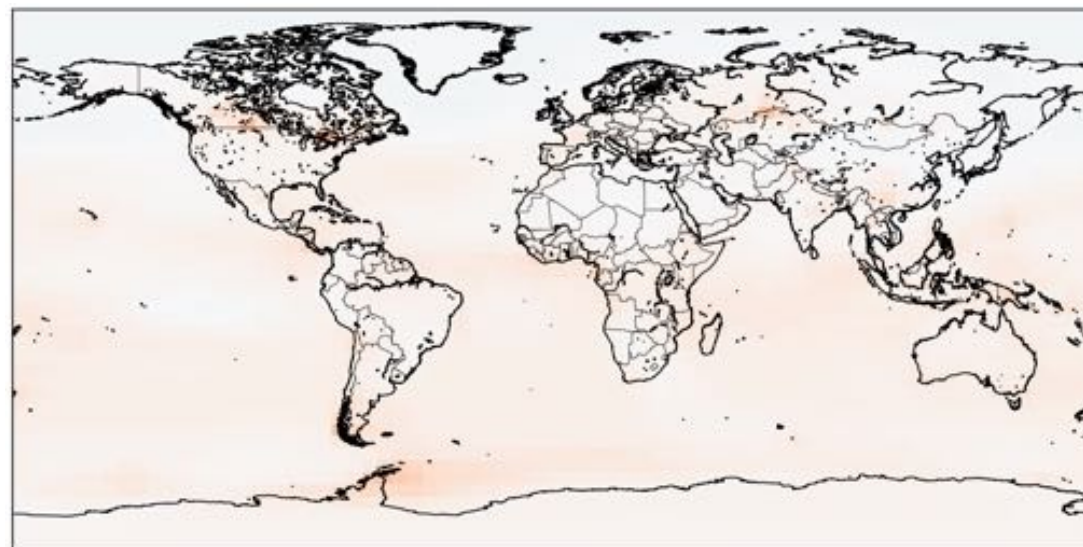


1x1



SO4 / ppbv

Percentage Difference

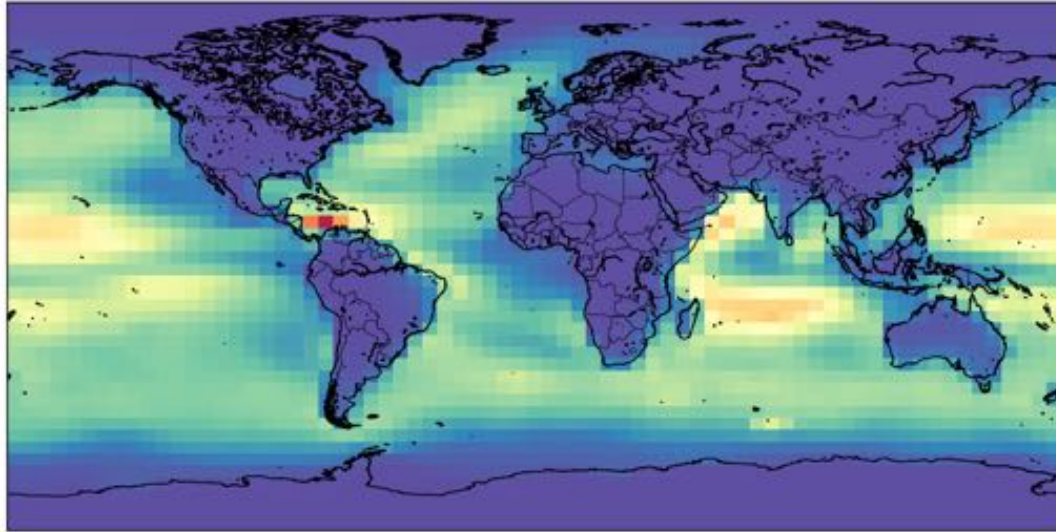


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

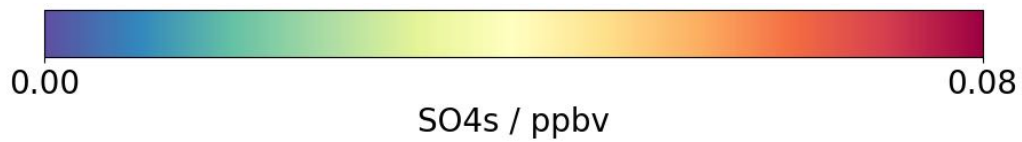
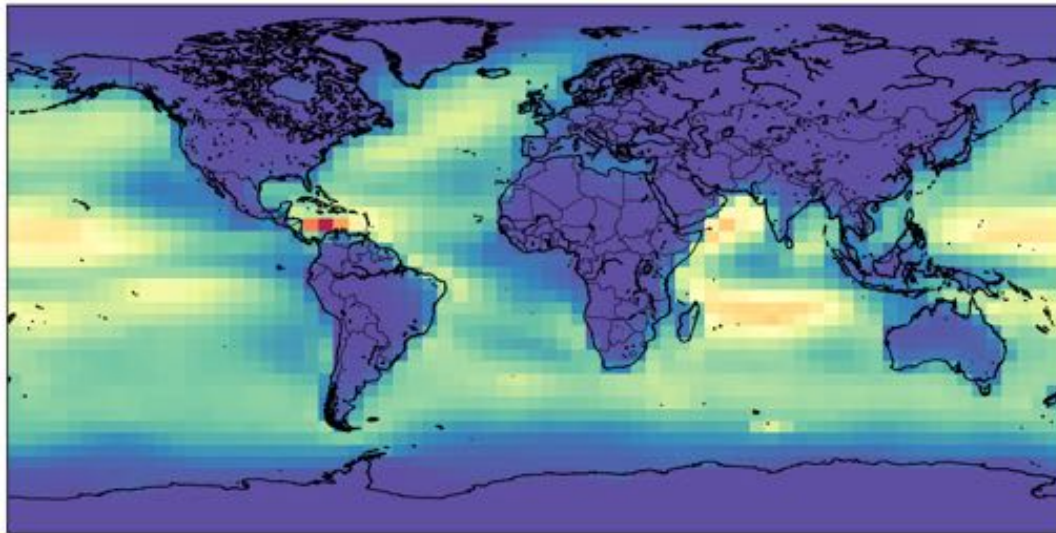
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

SO₄s

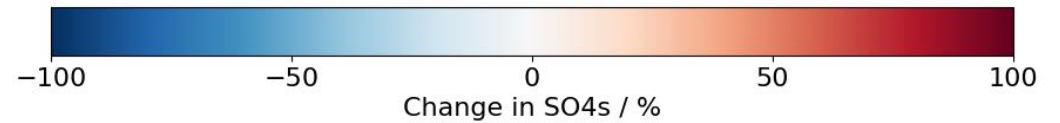
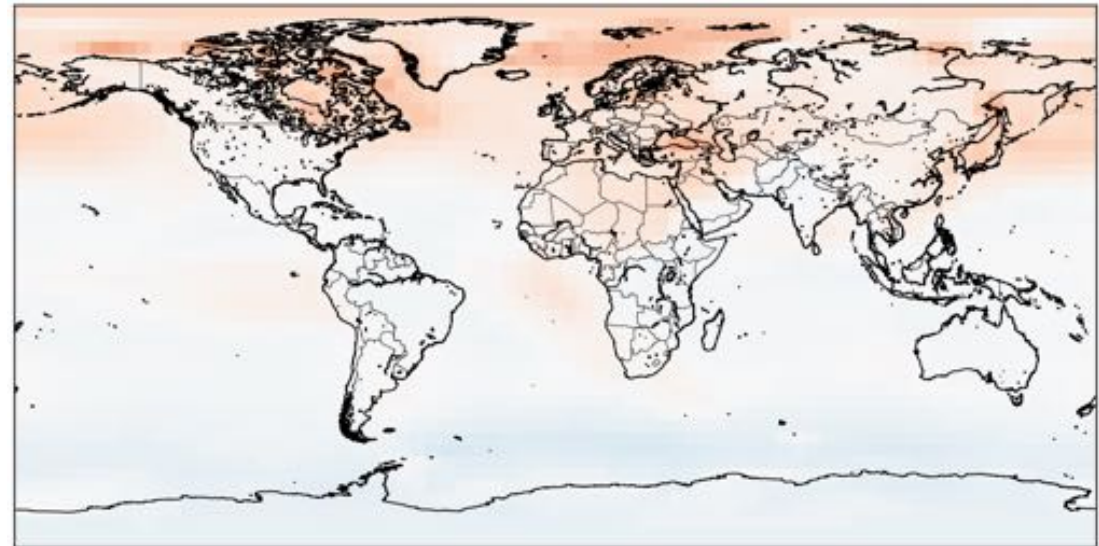
4x5



1x1



Percentage Difference

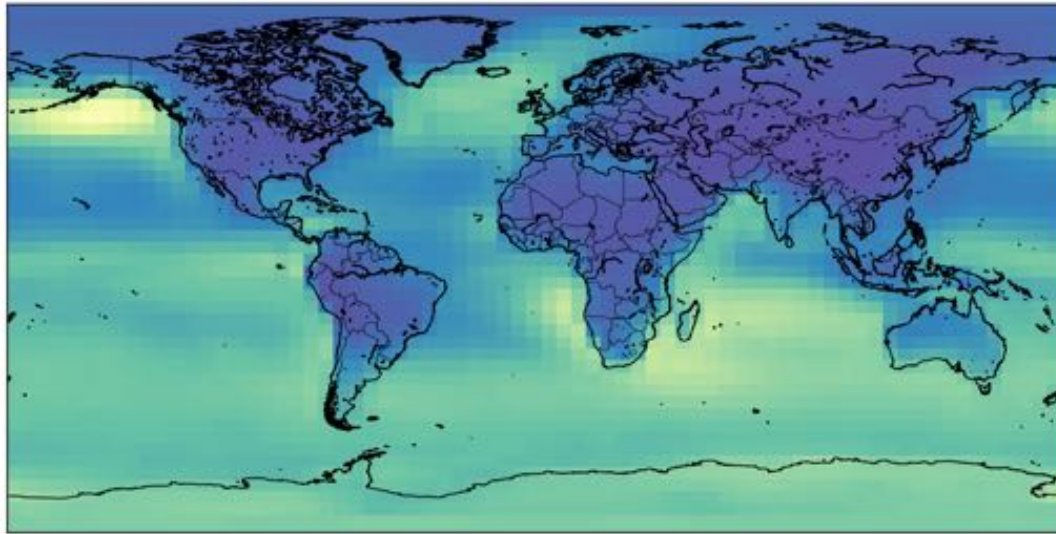


Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

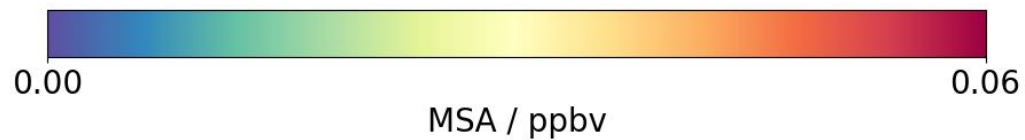
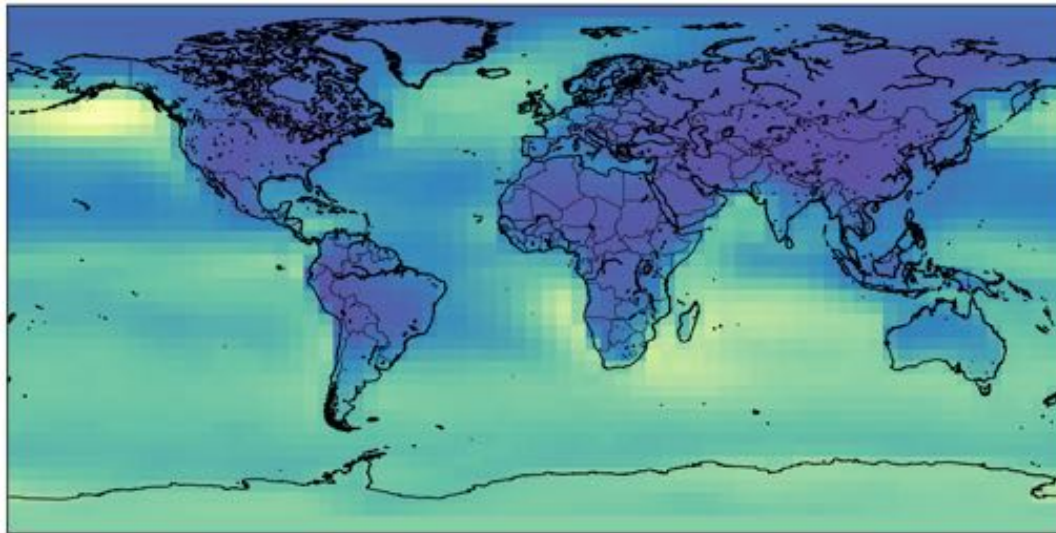
Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions

MSA

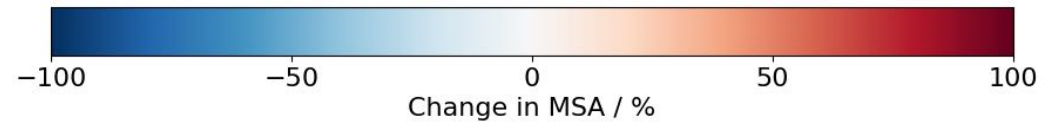
4x5



1x1



Percentage Difference

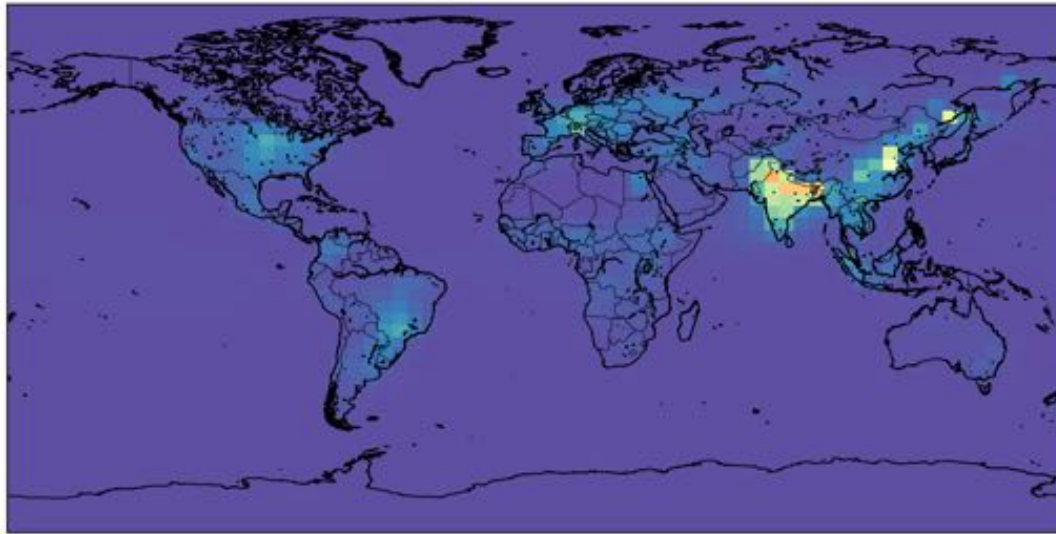


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

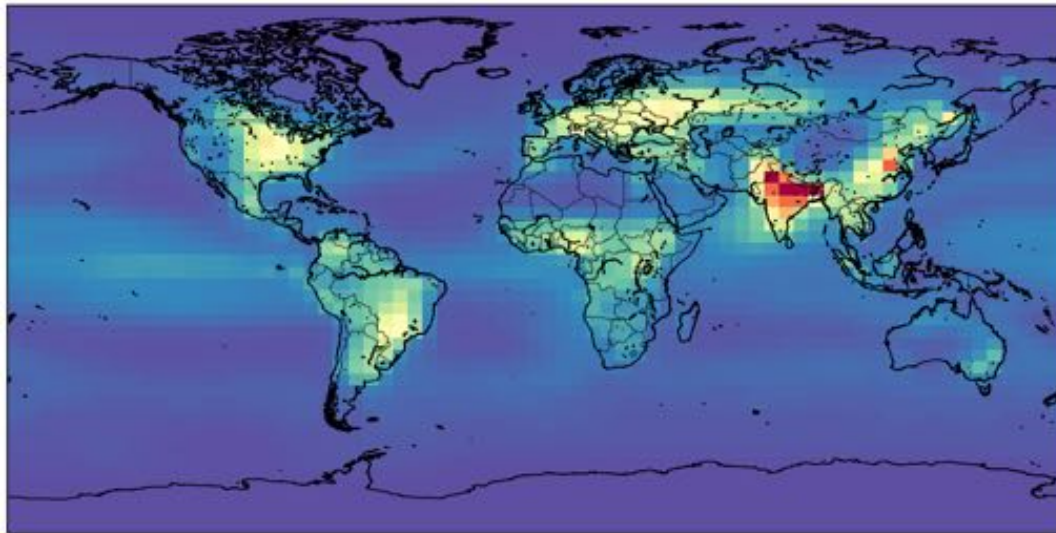
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

NH3

4x5

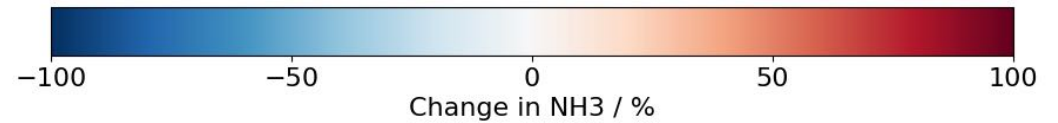
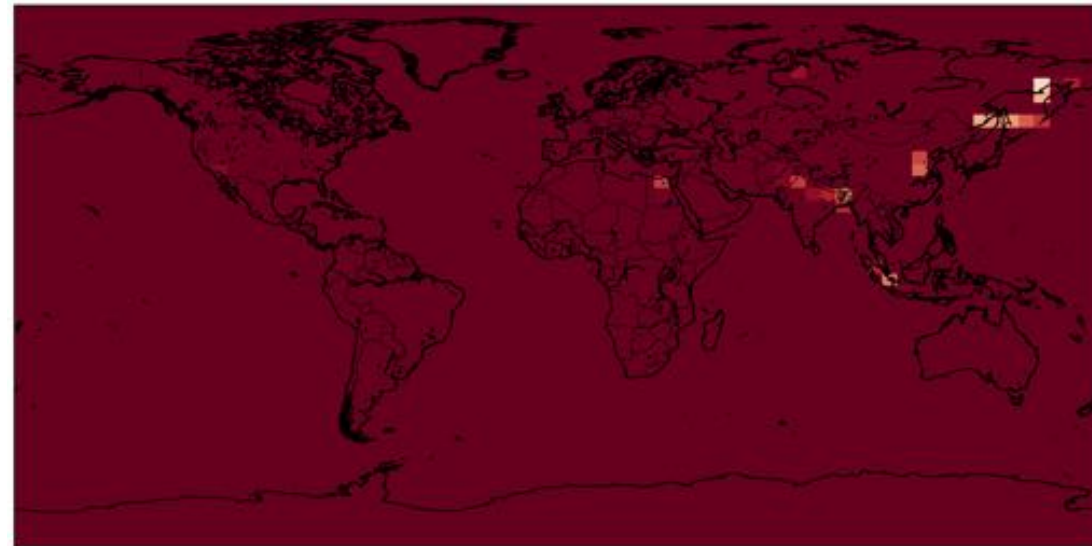


1x1



NH3 / ppbv

Percentage Difference

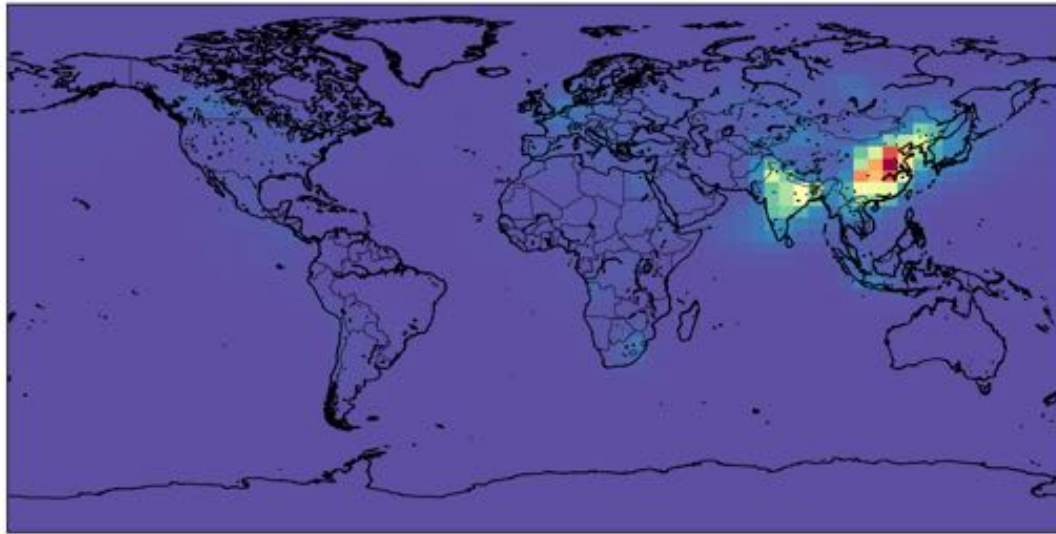


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

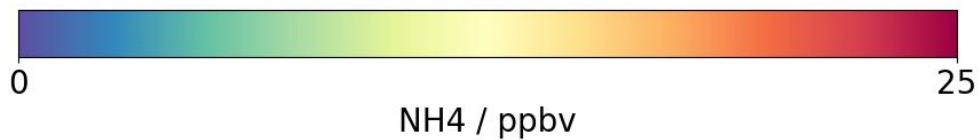
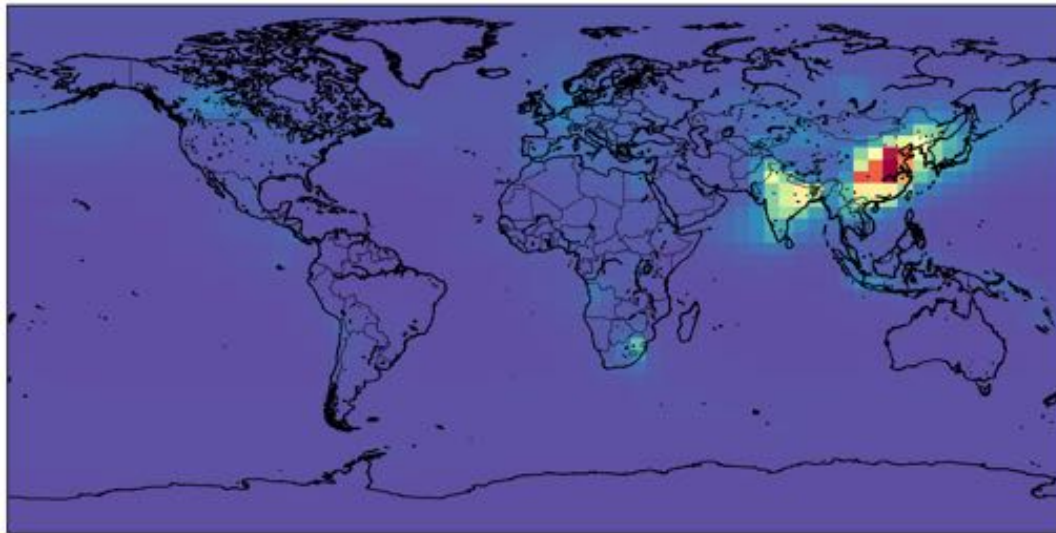
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

NH4

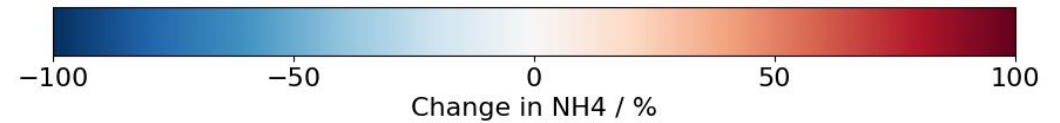
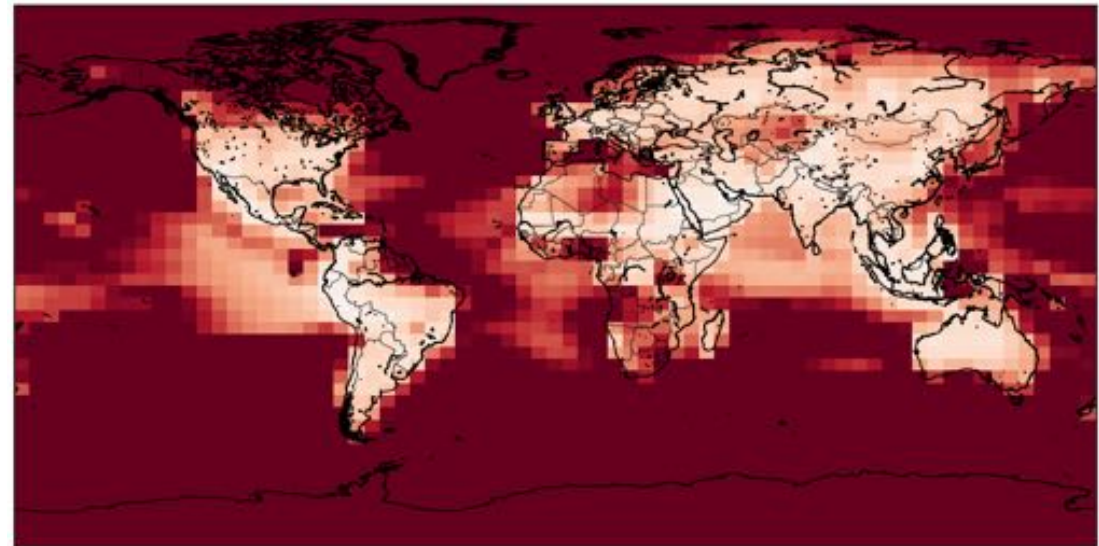
4x5



1x1



Percentage Difference

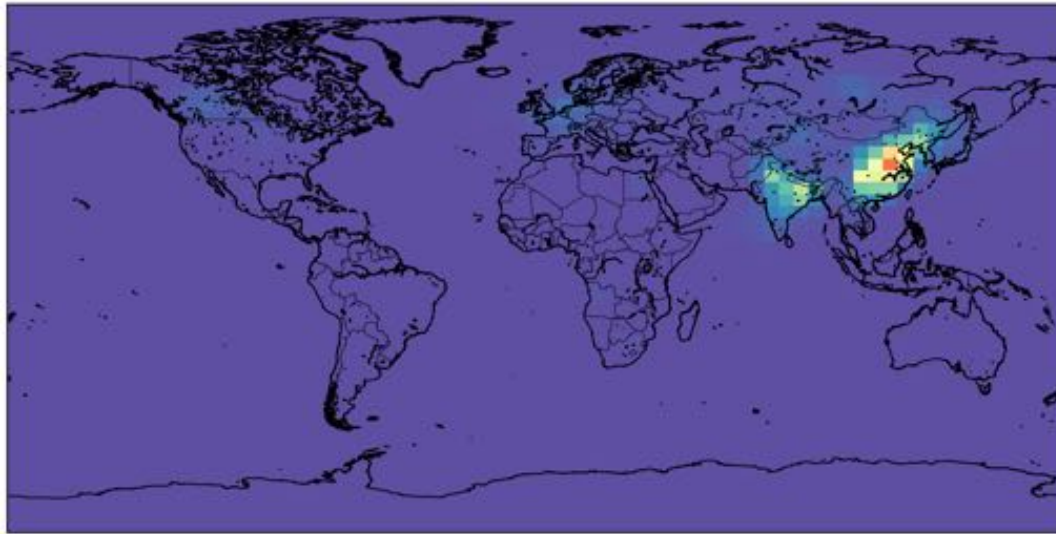


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

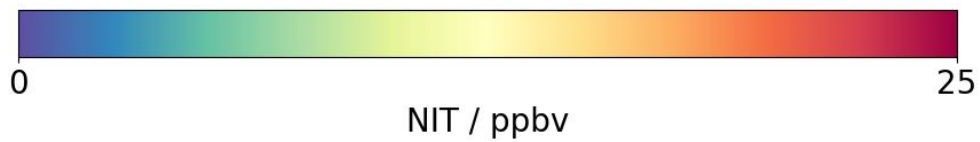
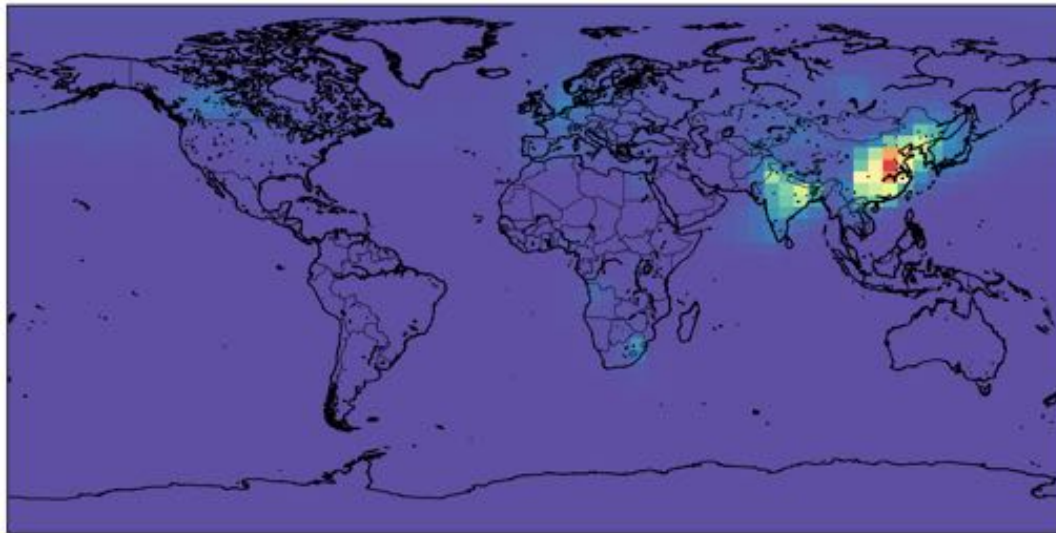
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

NIT

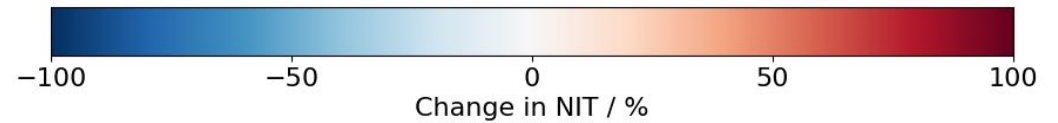
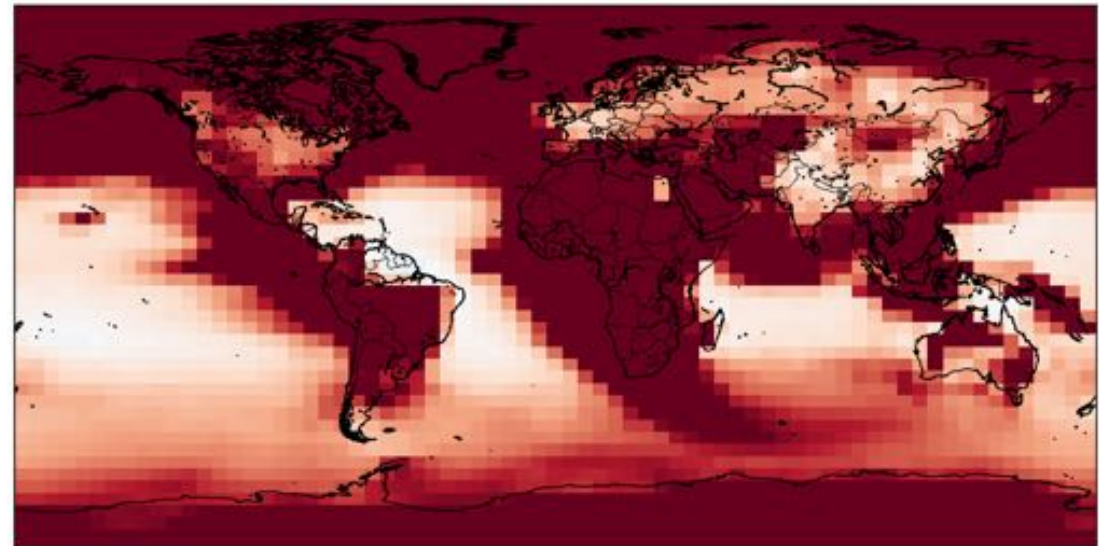
4x5



1x1



Percentage Difference

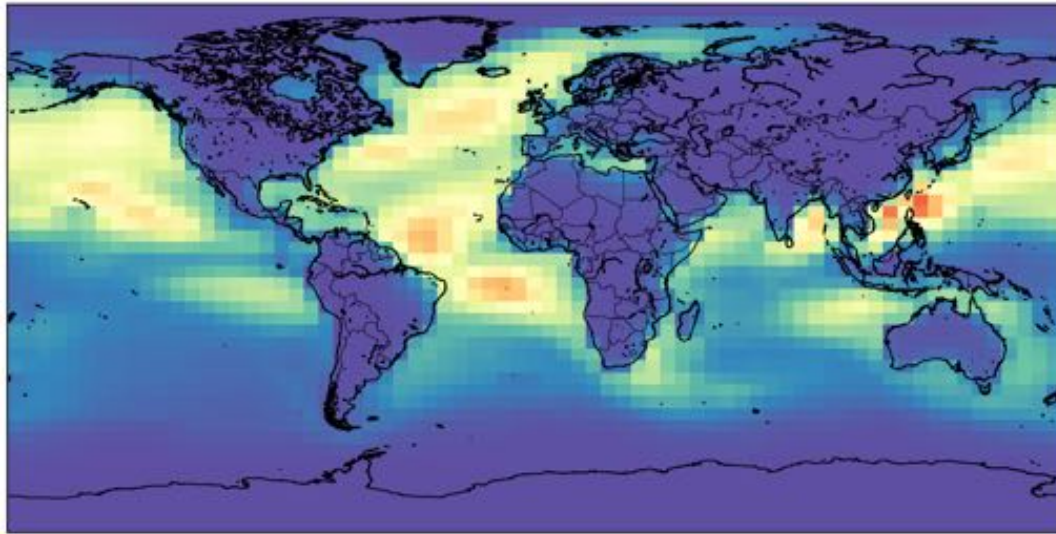


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

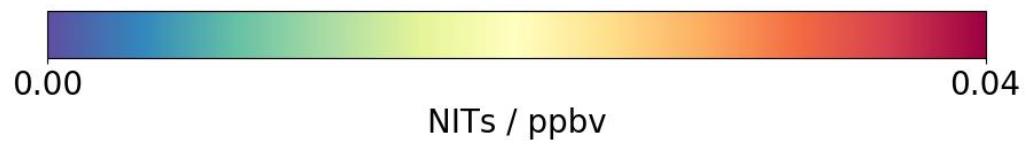
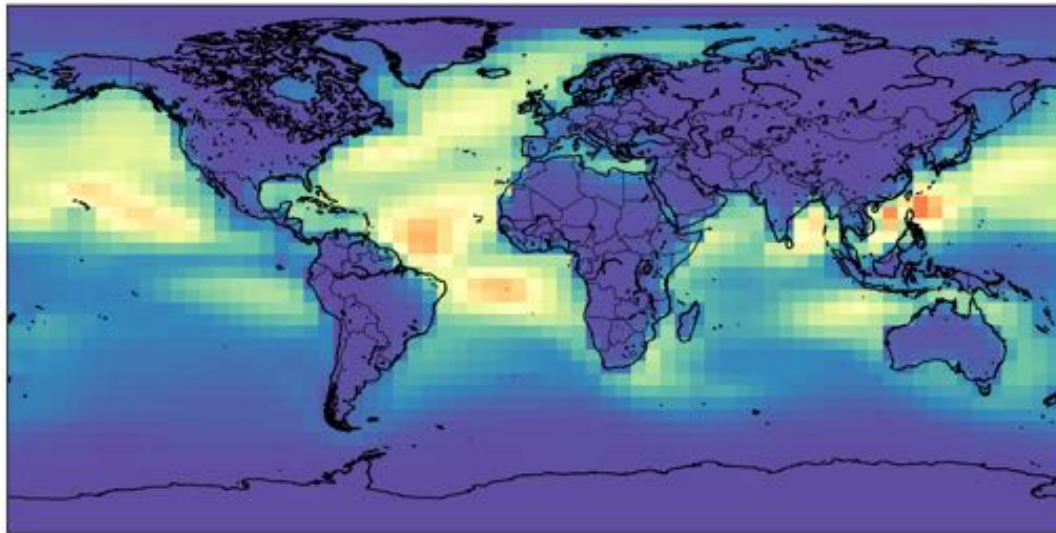
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

NITs

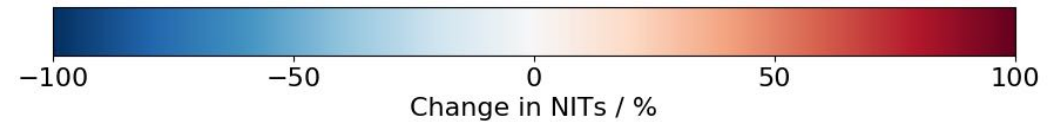
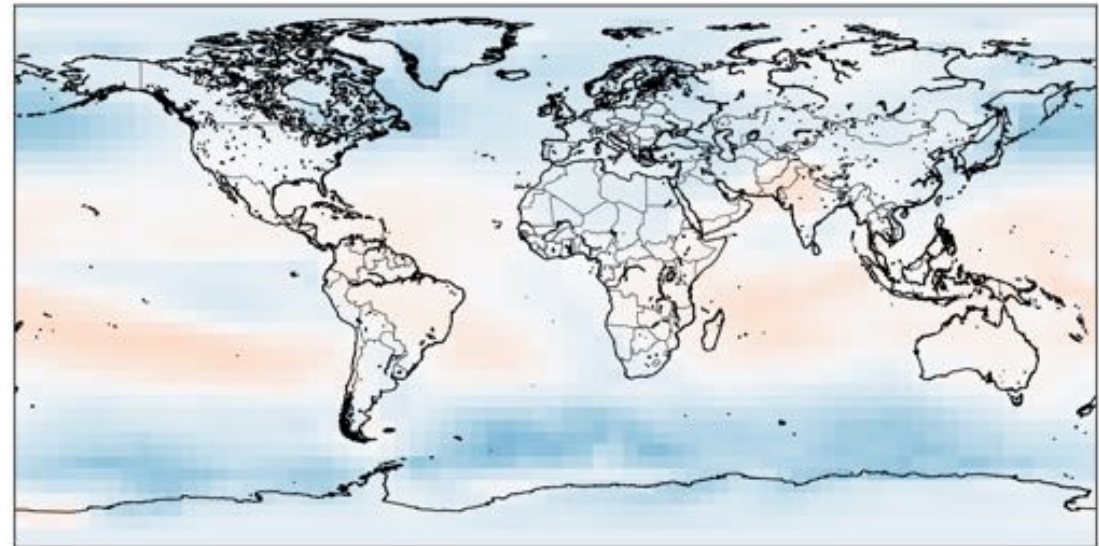
4x5



1x1



Percentage Difference

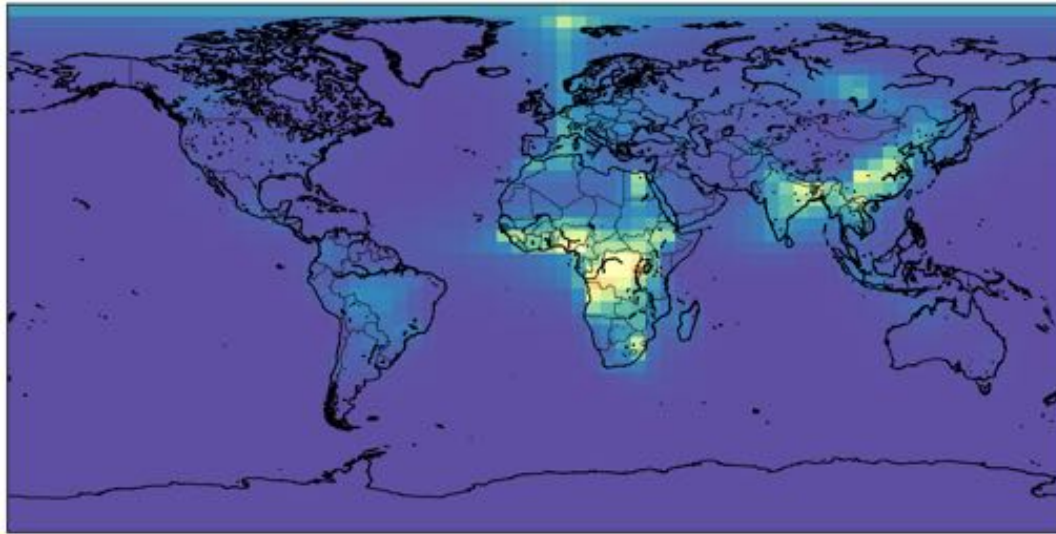


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

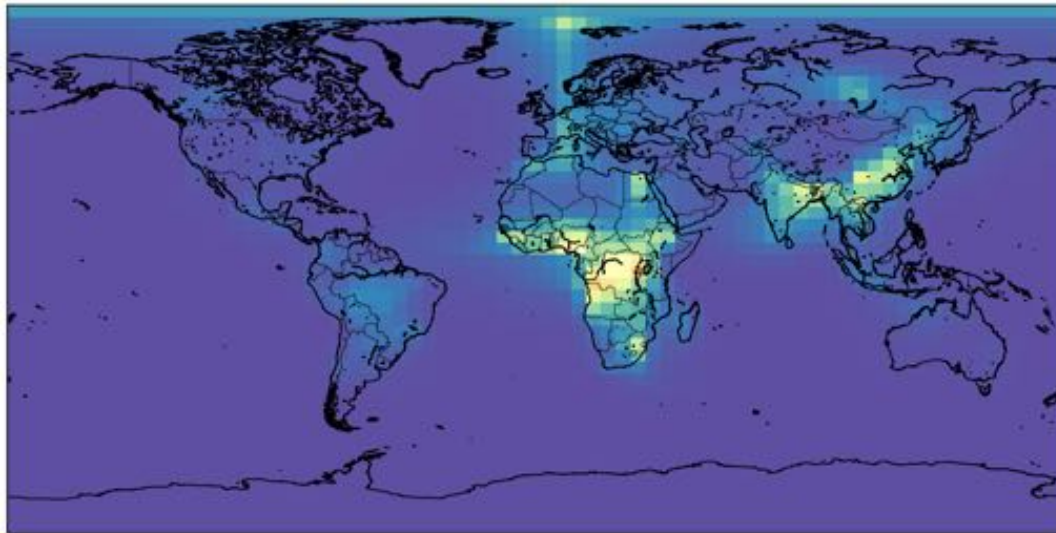
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

BCPI

4x5

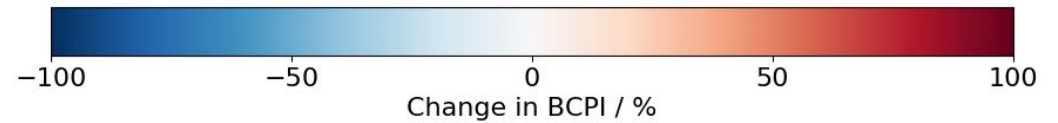
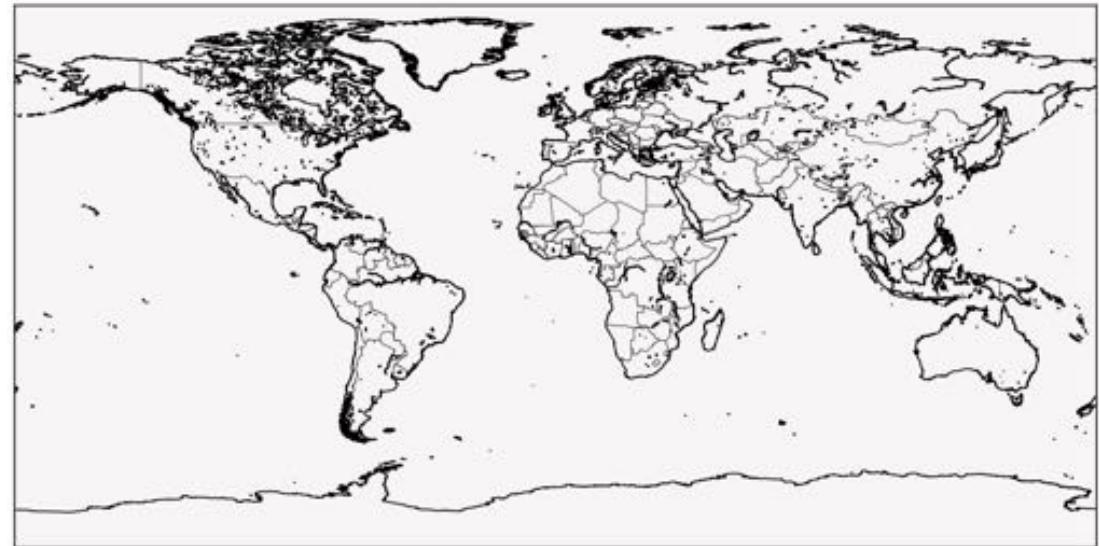


1x1



BCPI / ppbv

Percentage Difference

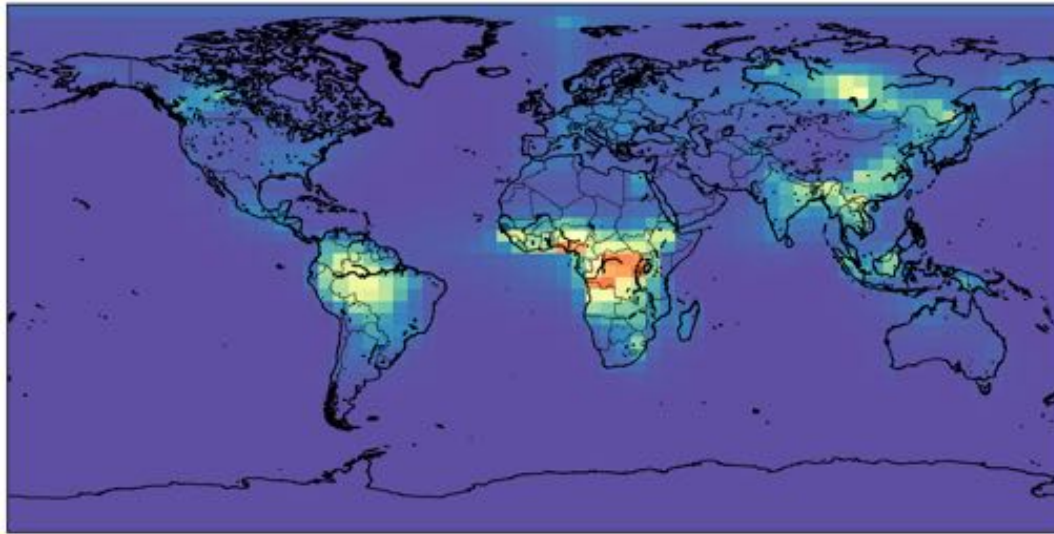


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

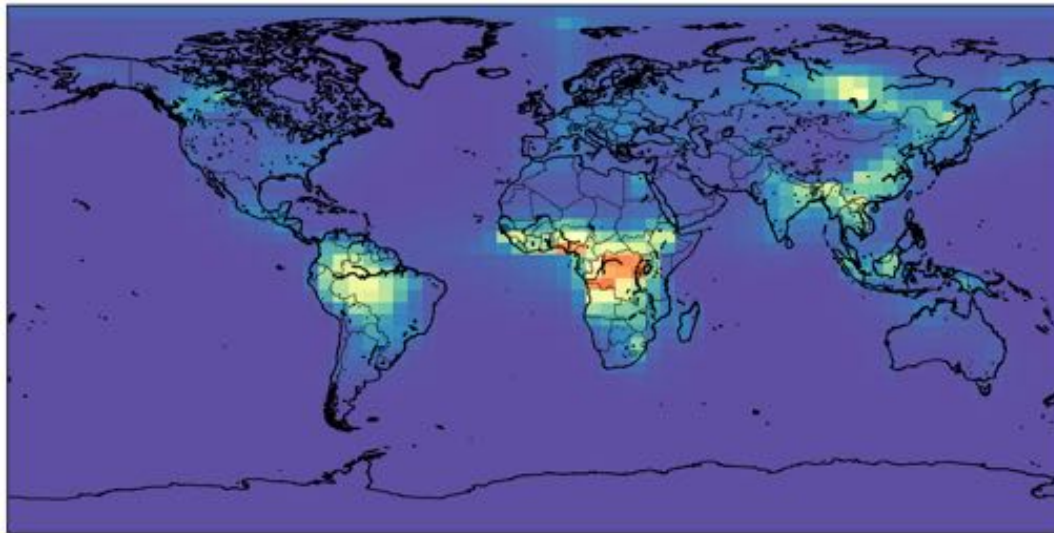
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

OCPI

4x5

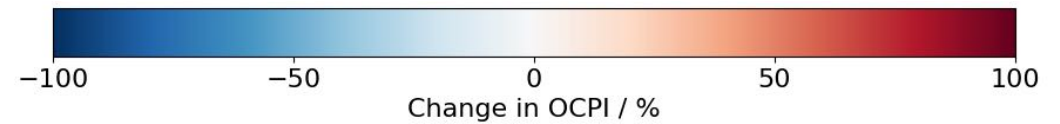
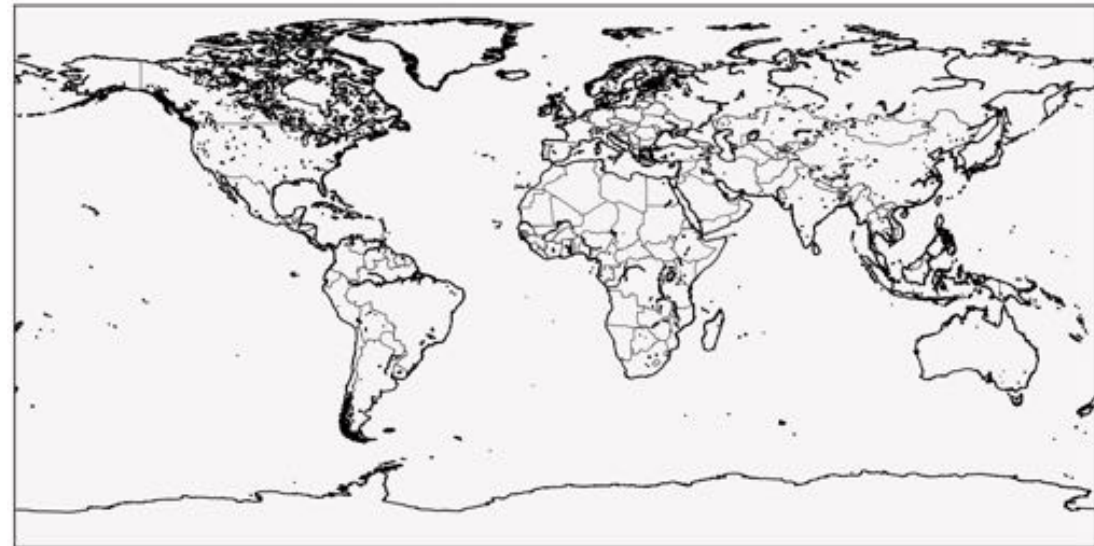


1x1



OCPI / ppbv

Percentage Difference

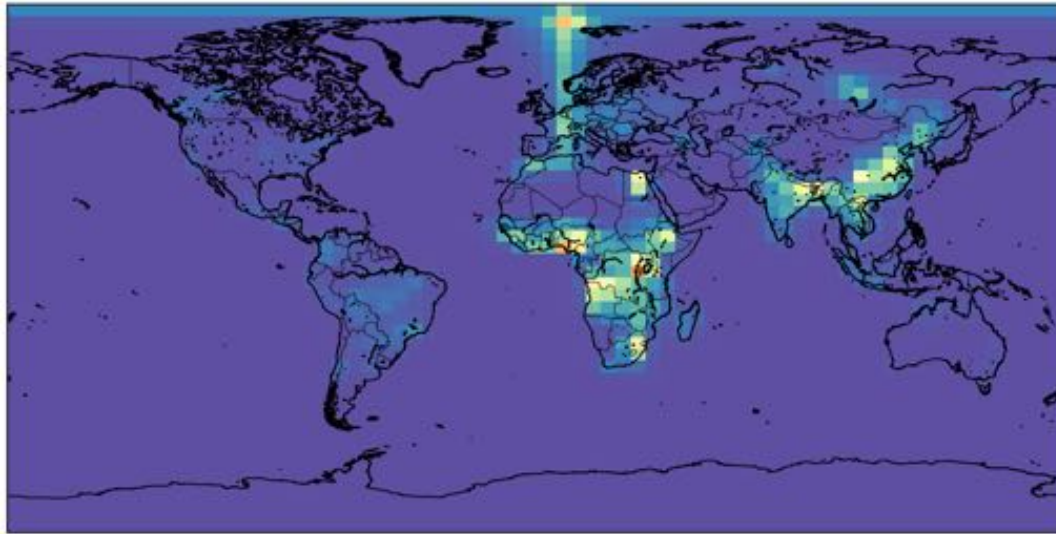


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

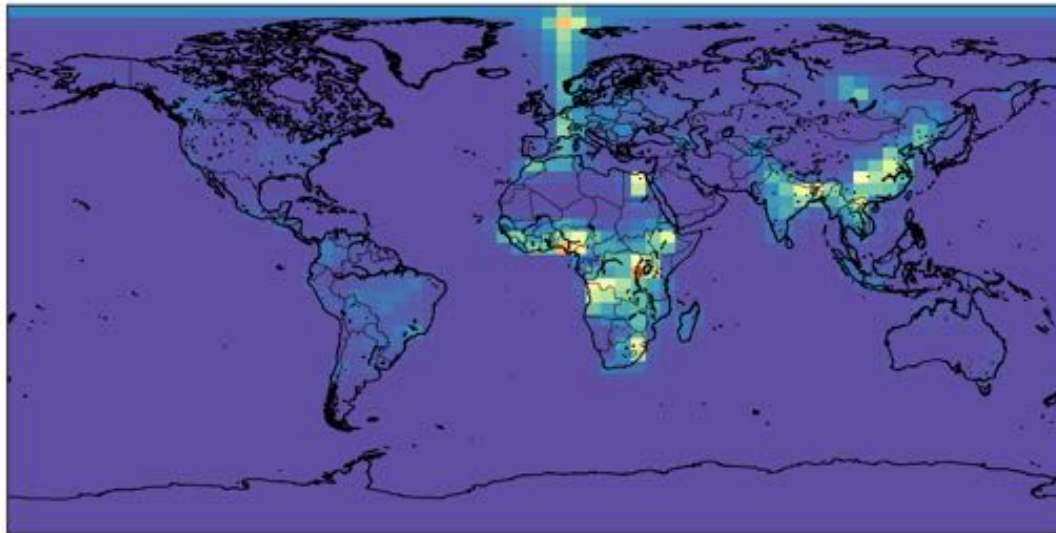
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

BCPO

4x5

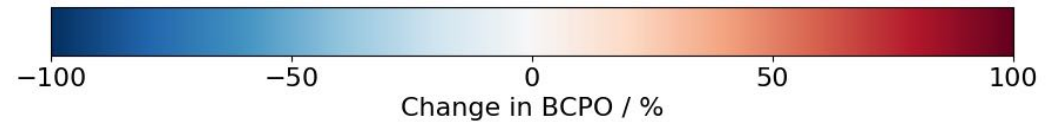
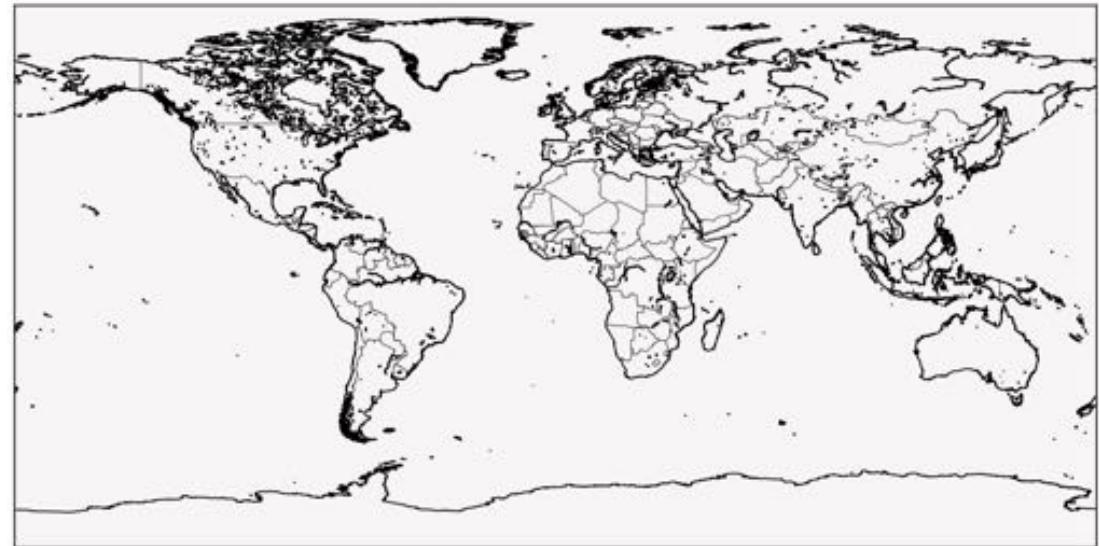


1x1



BCPO / ppbv

Percentage Difference

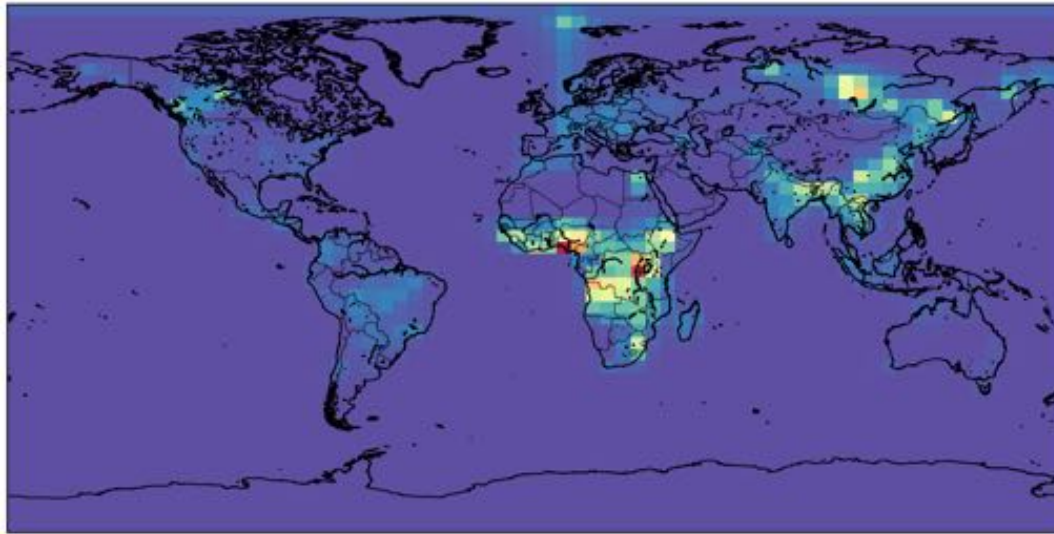


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

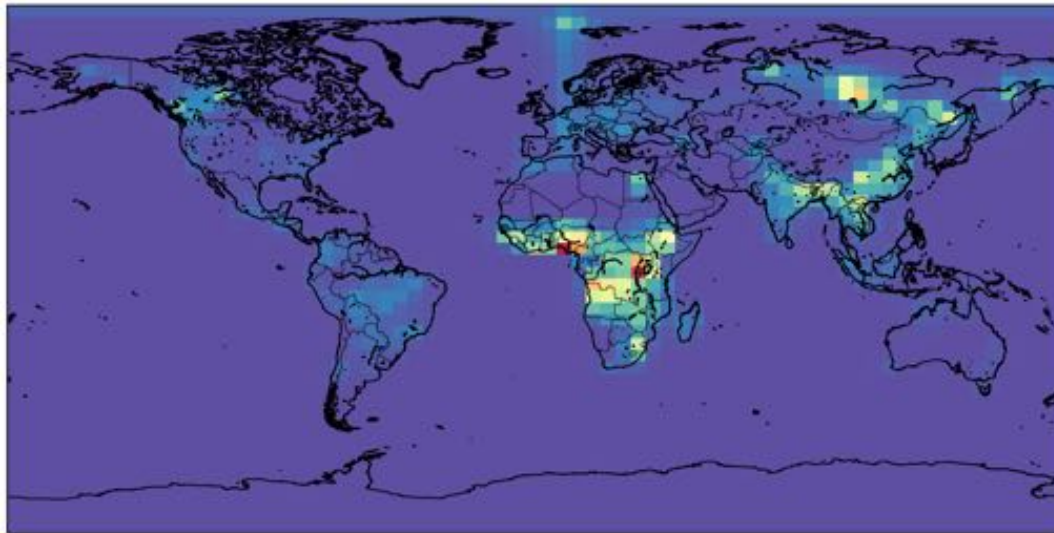
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

OCPO

4x5

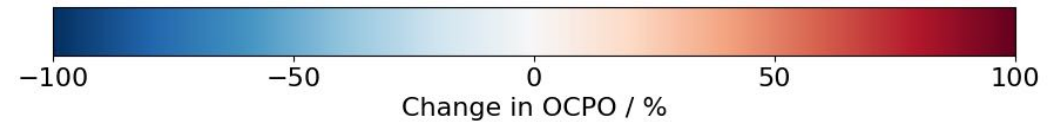
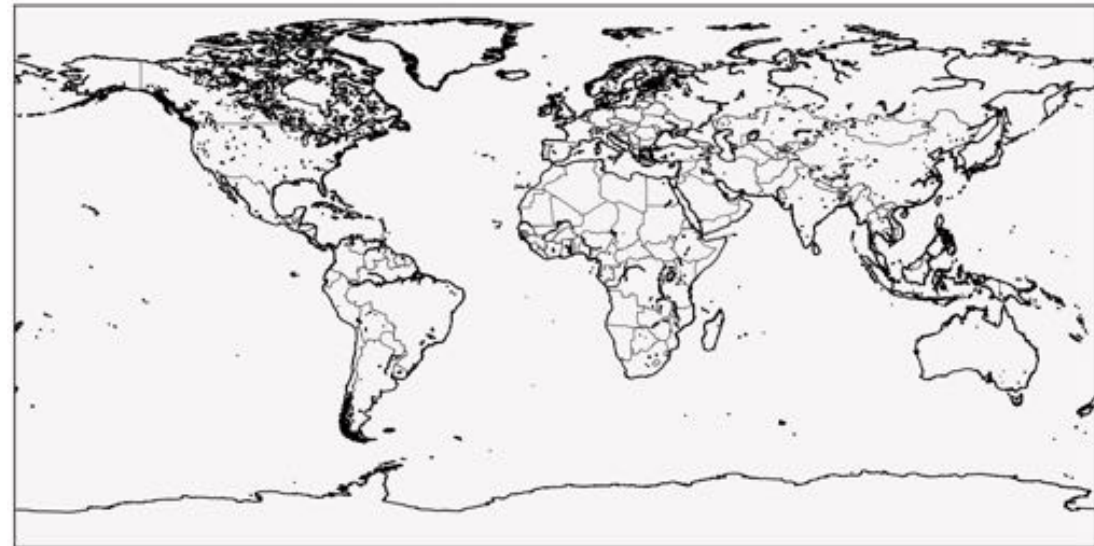


1x1



OCPO / ppbv

Percentage Difference

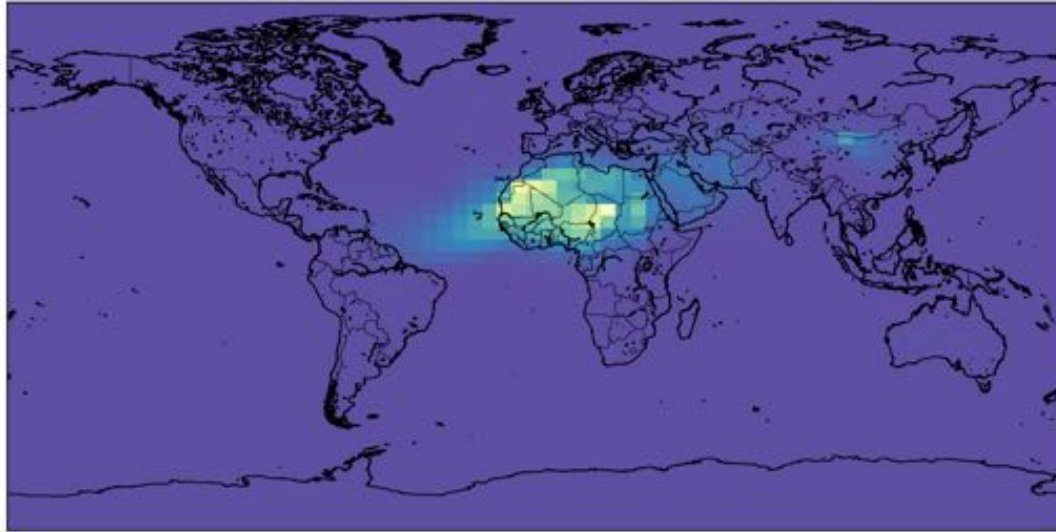


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

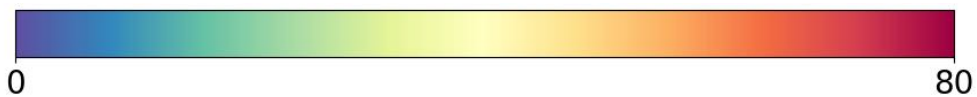
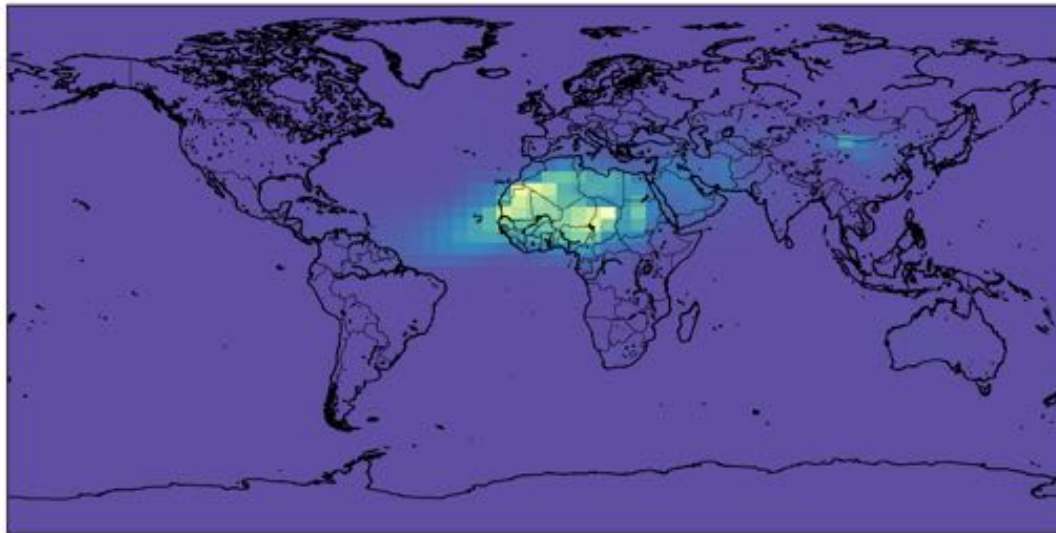
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

DST1

4x5

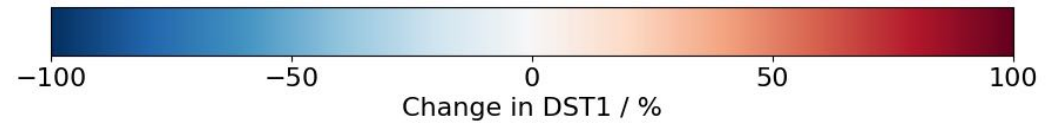
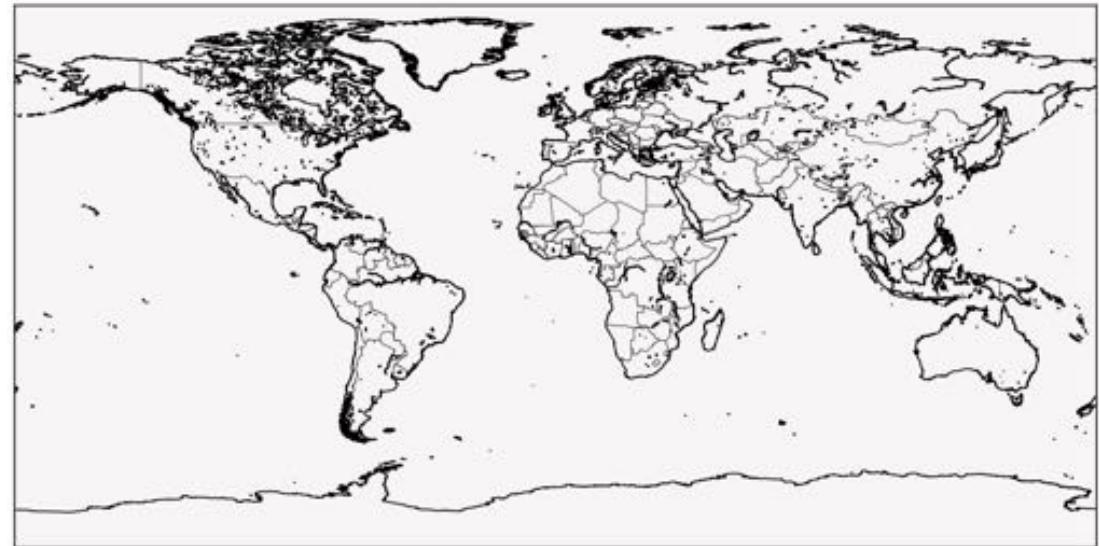


1x1



DST1 / ppbv

Percentage Difference

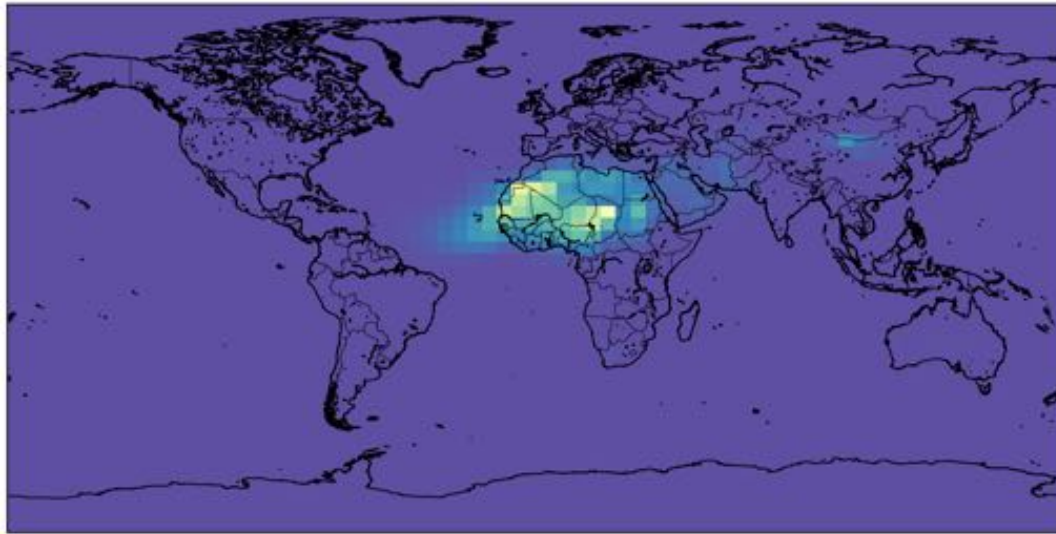


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

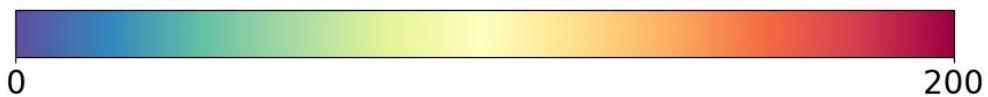
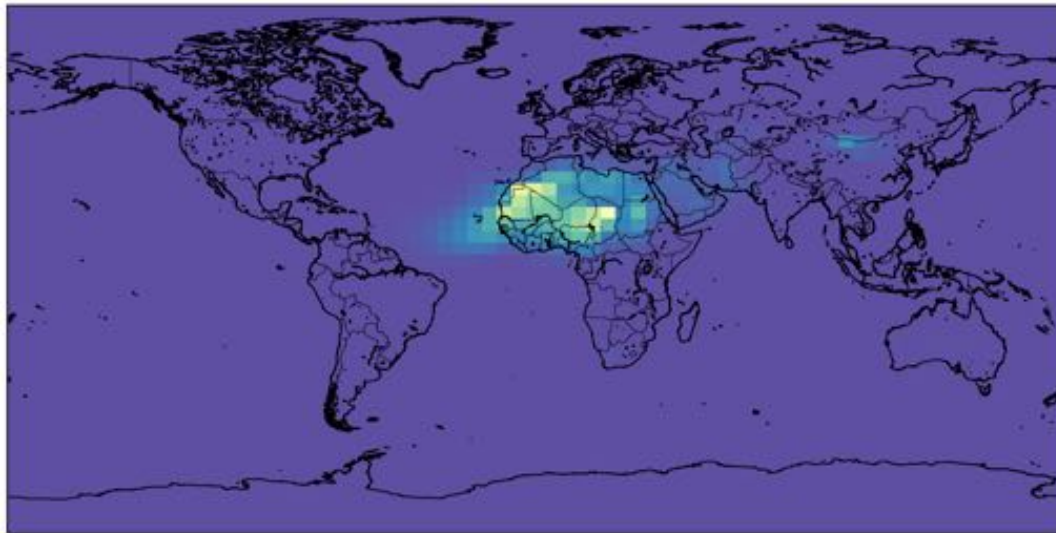
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

DST2

4x5

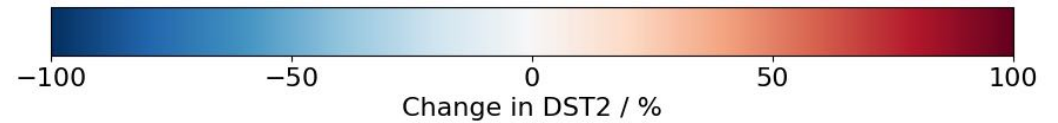
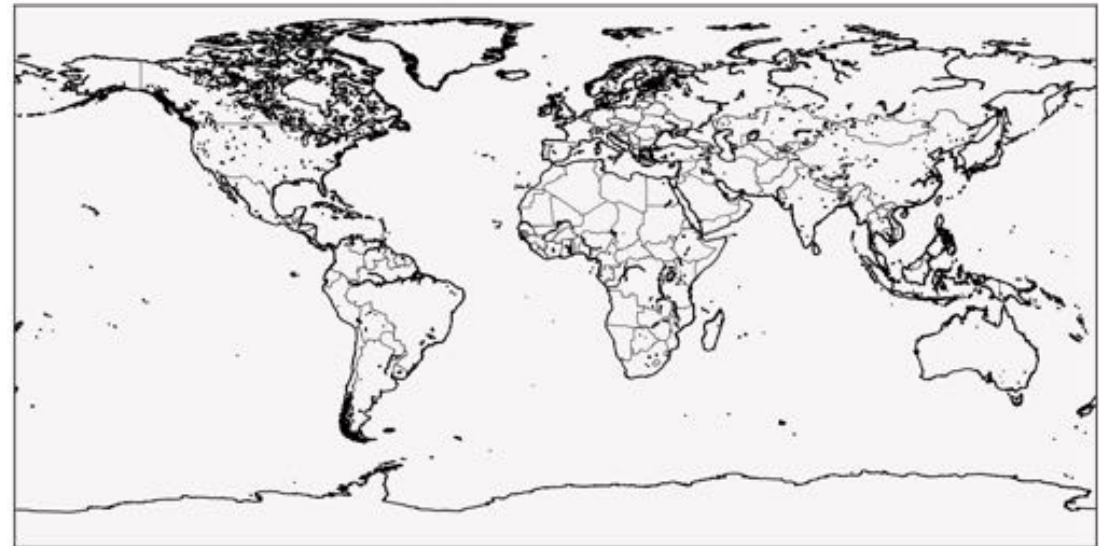


1x1



DST2 / ppbv

Percentage Difference

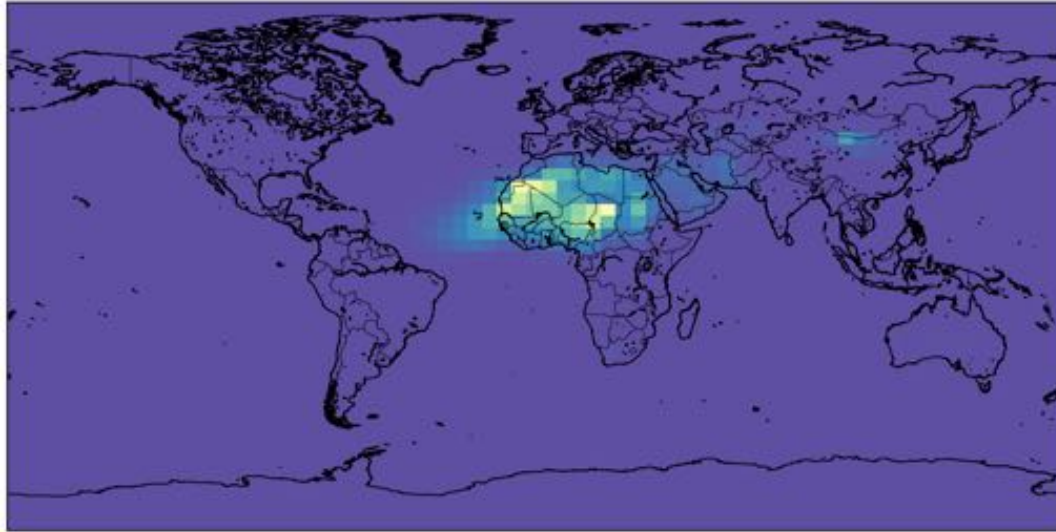


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

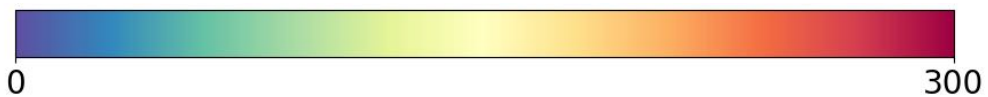
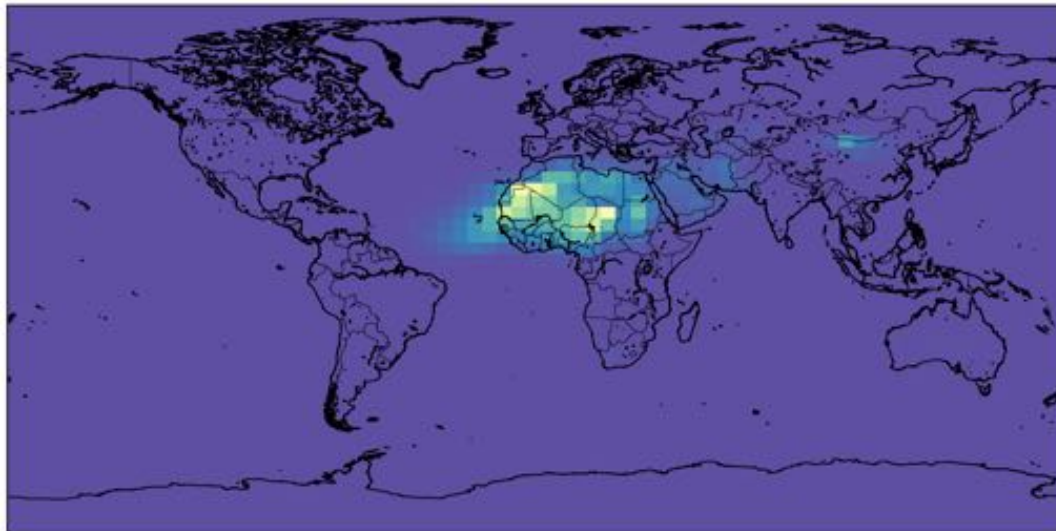
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

DST3

4x5

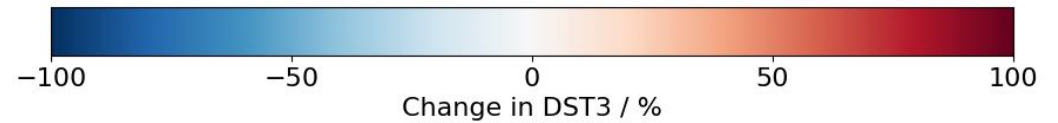
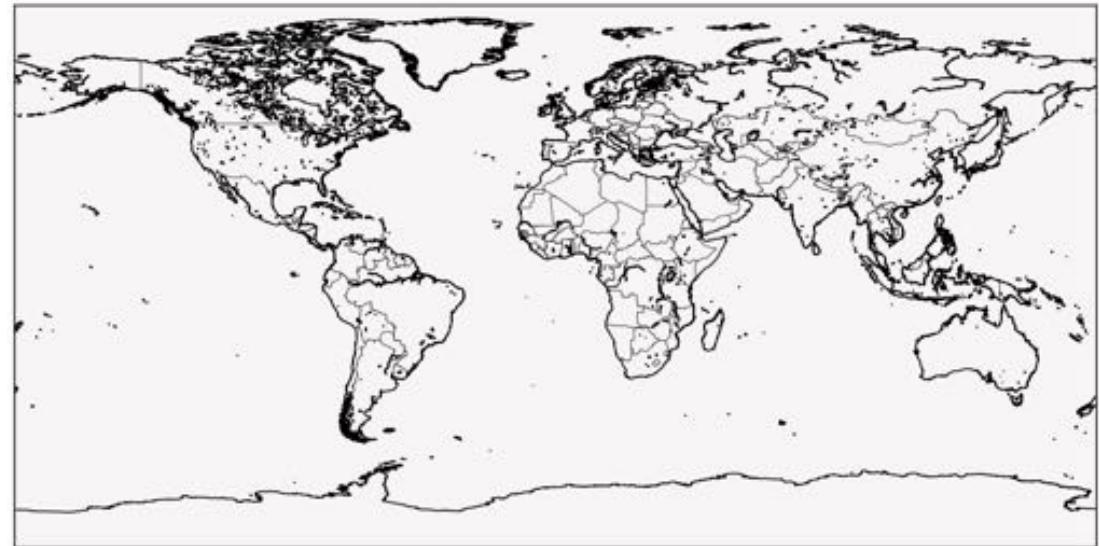


1x1



DST3 / ppbv

Percentage Difference

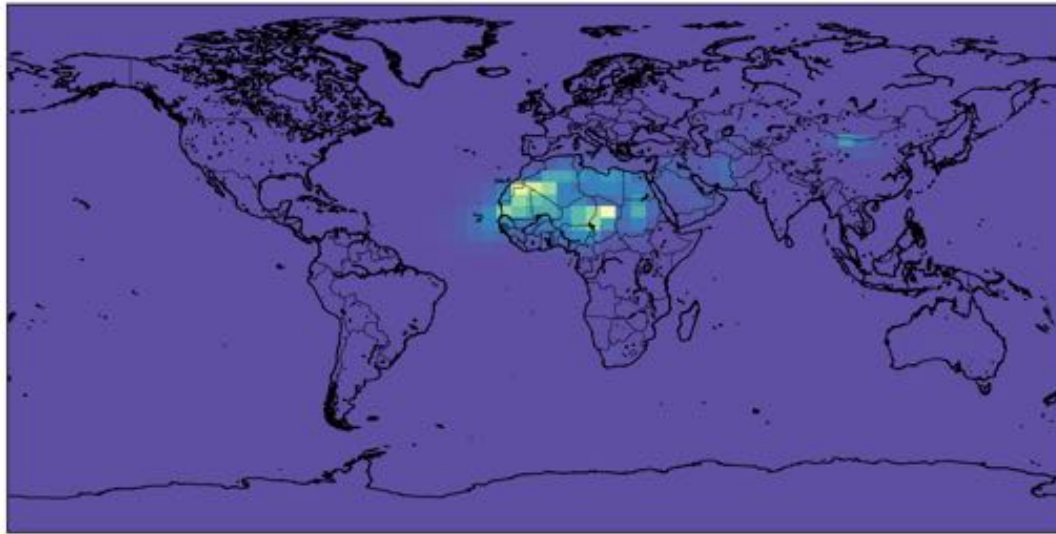


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

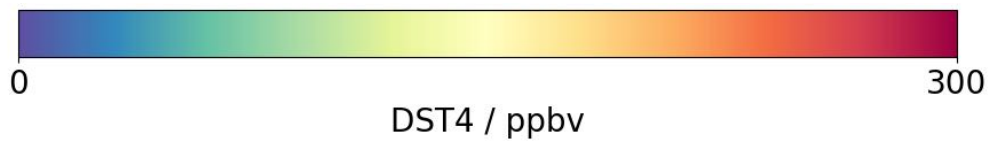
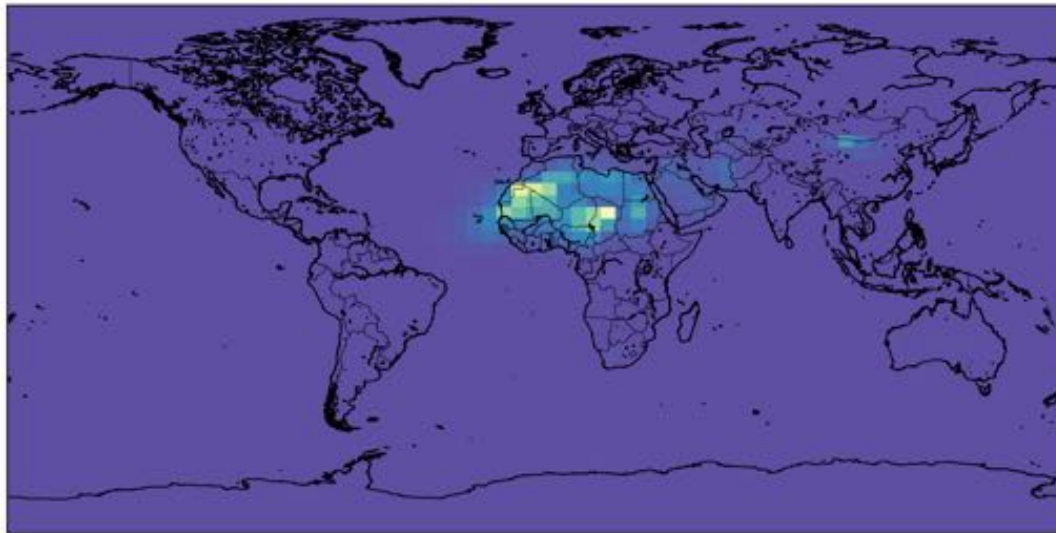
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

DST4

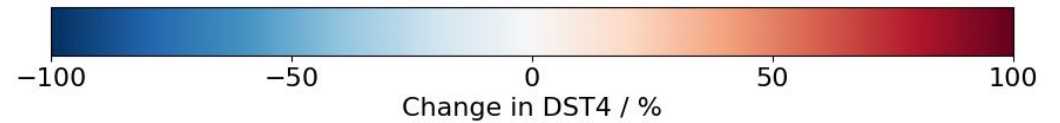
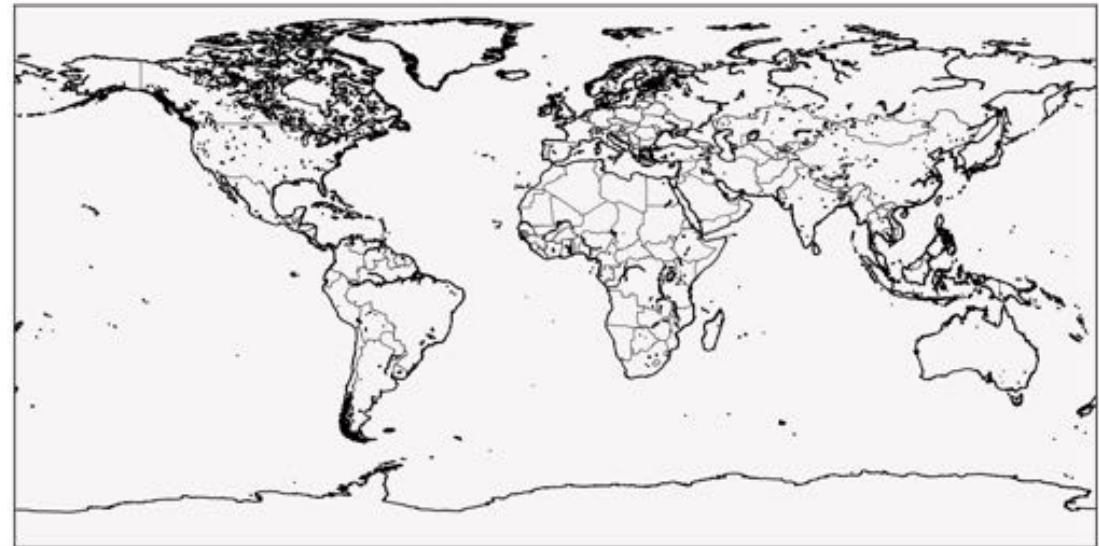
4x5



1x1



Percentage Difference

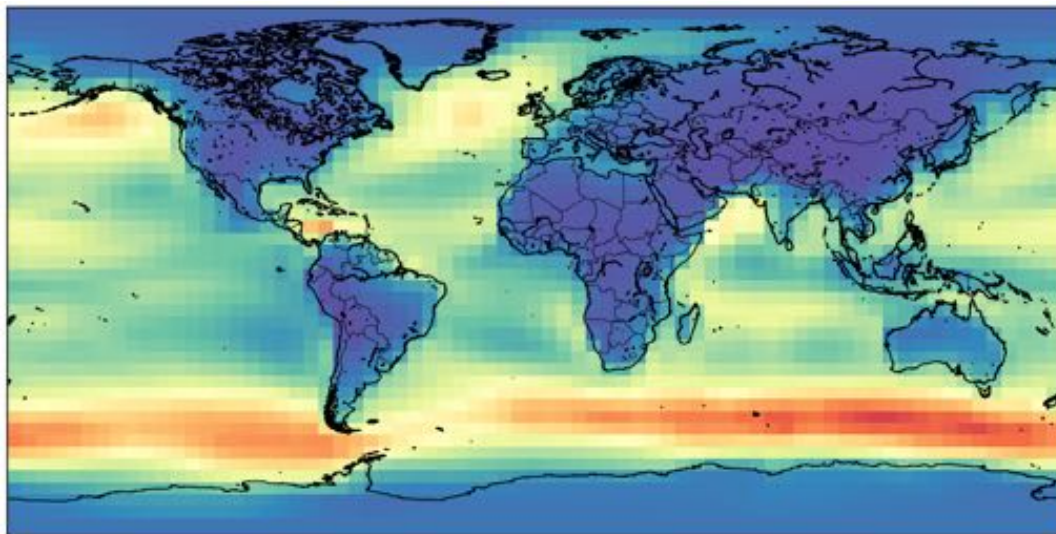


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

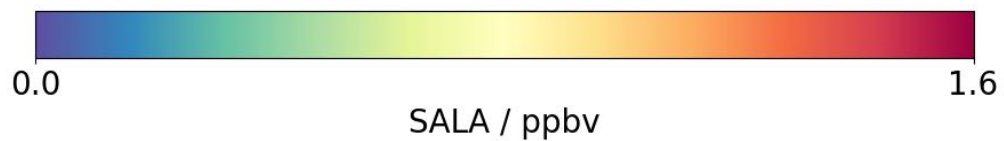
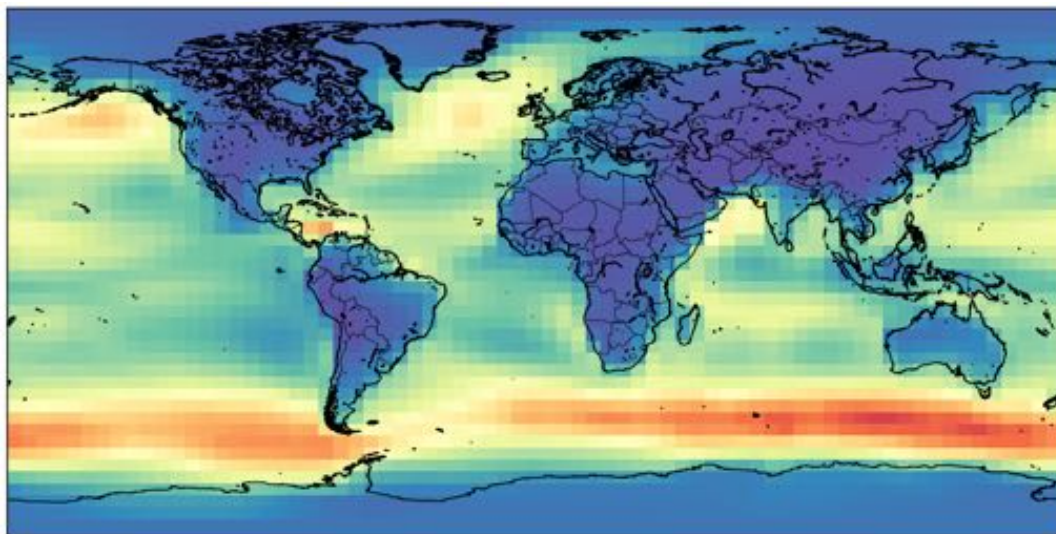
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

SALA

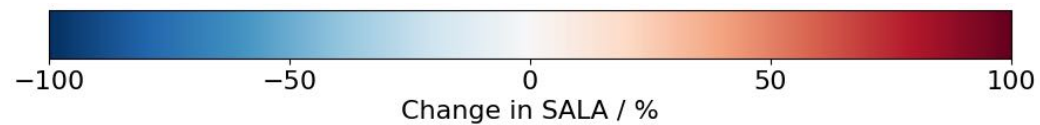
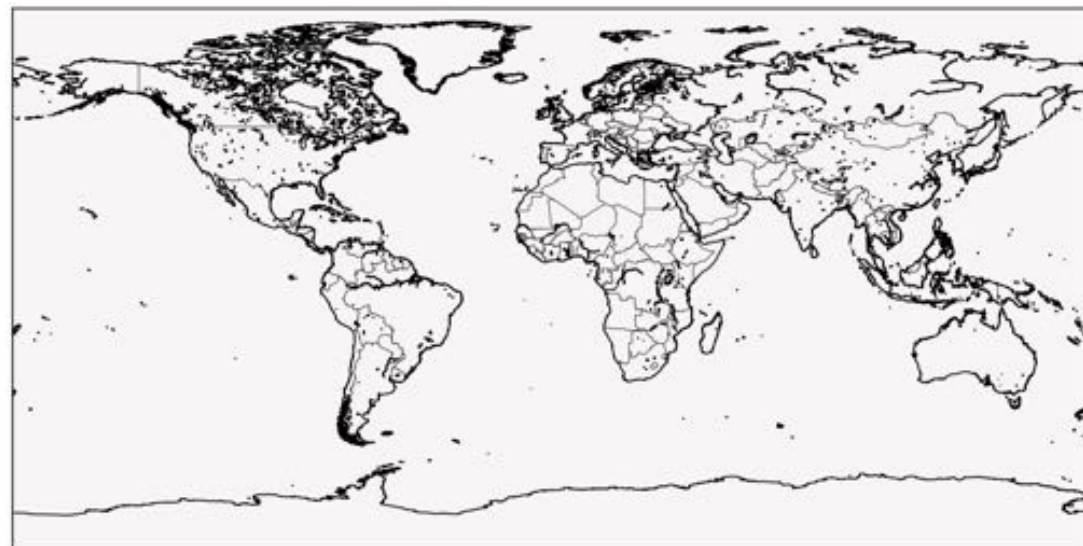
4x5



1x1



Percentage Difference

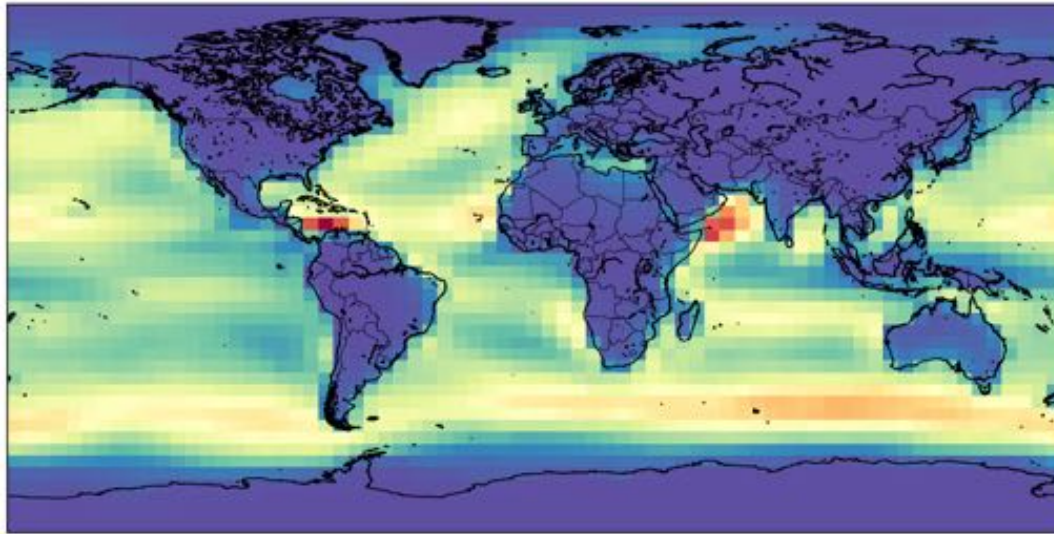


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

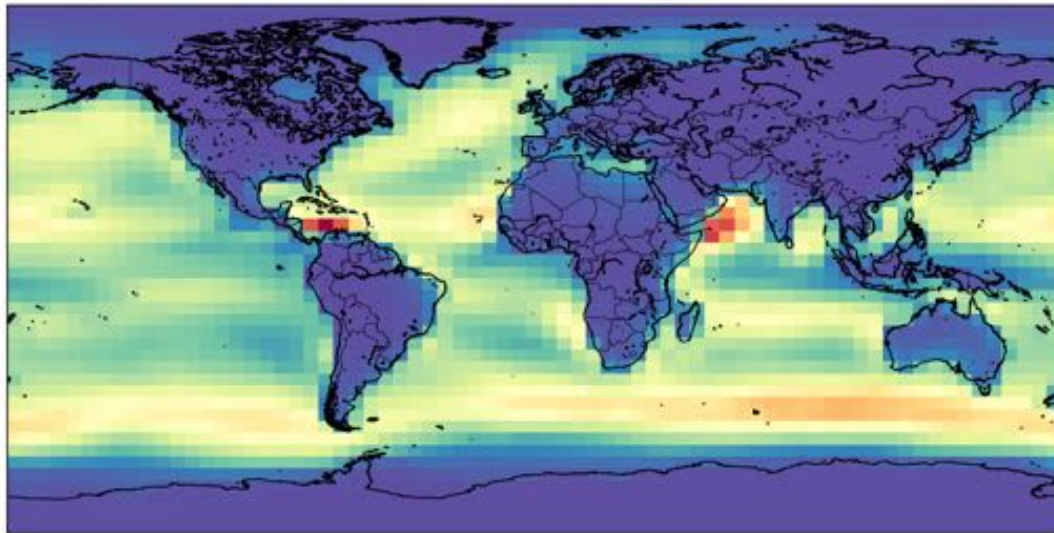
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

SALC

4x5

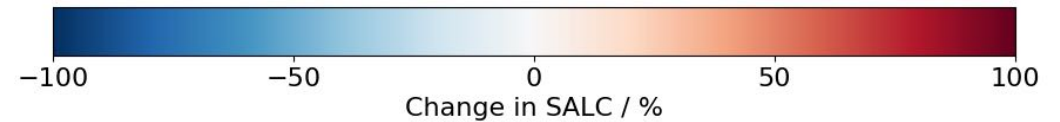
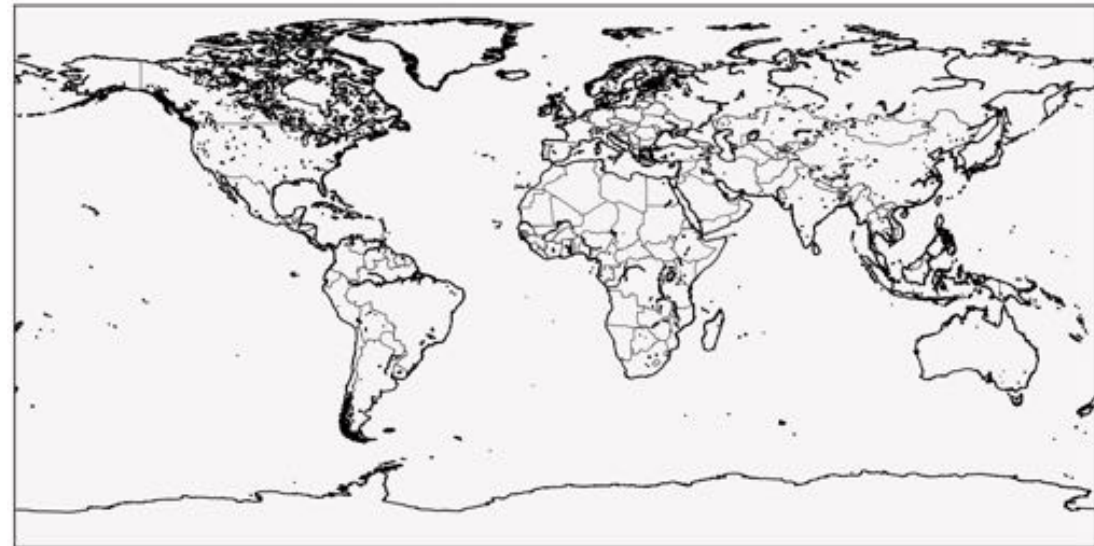


1x1



SALC / ppbv

Percentage Difference

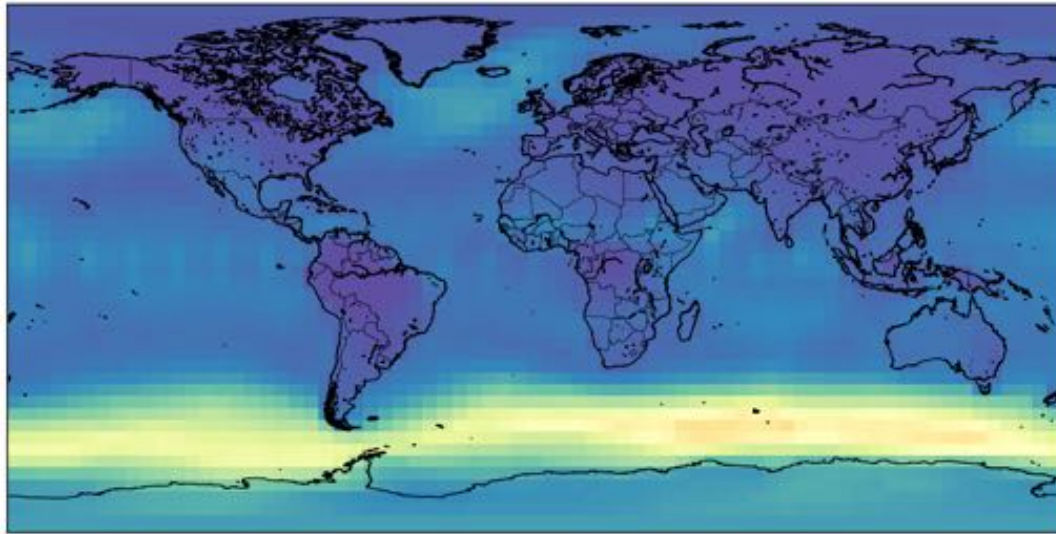


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

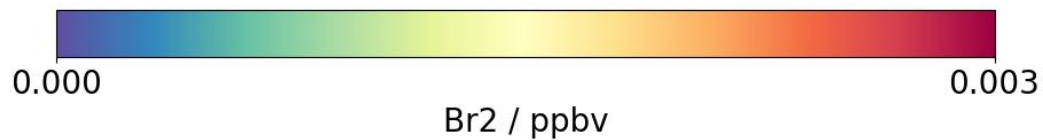
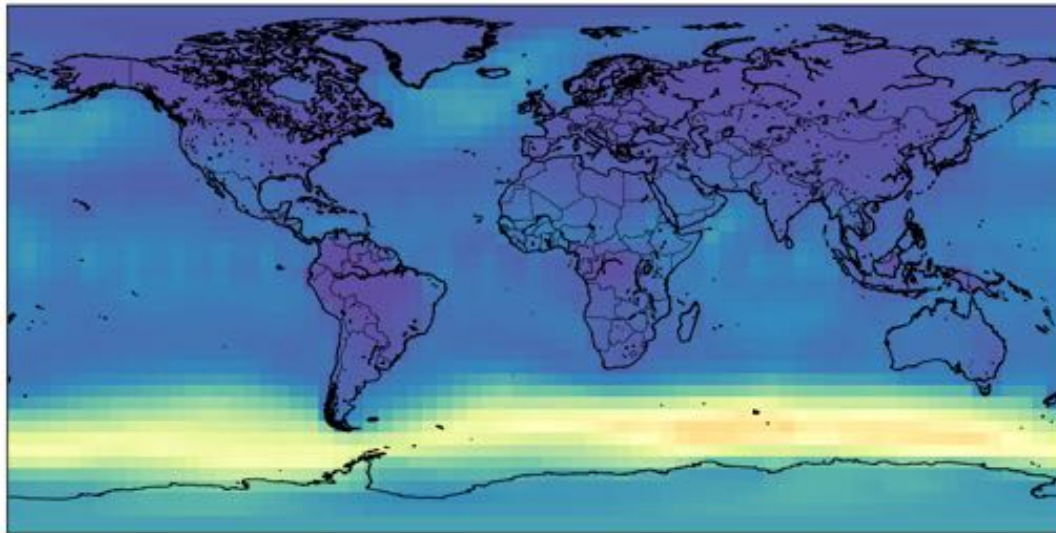
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

Br2

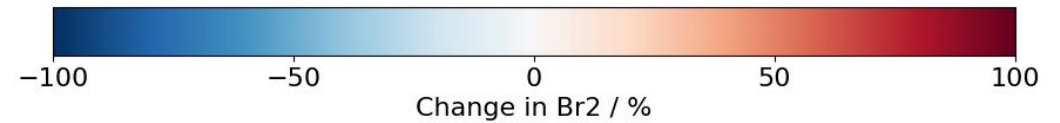
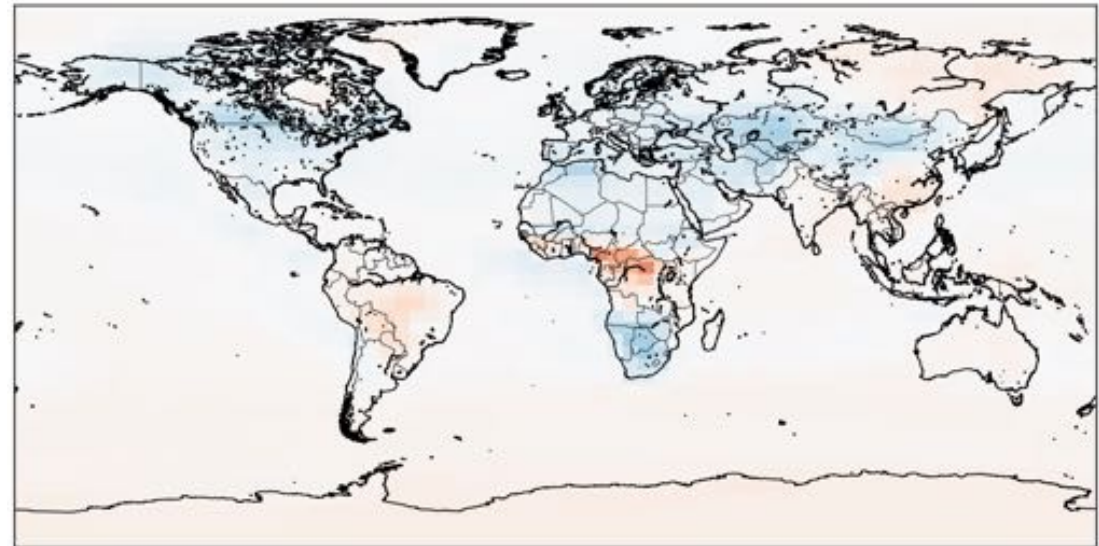
4x5



1x1



Percentage Difference

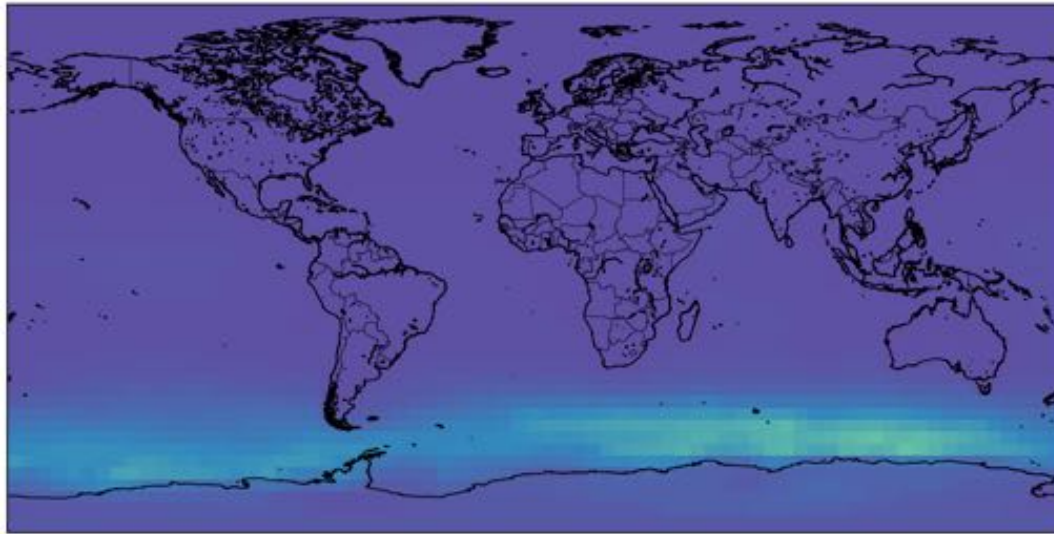


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

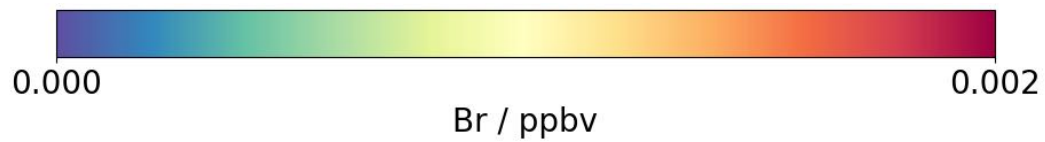
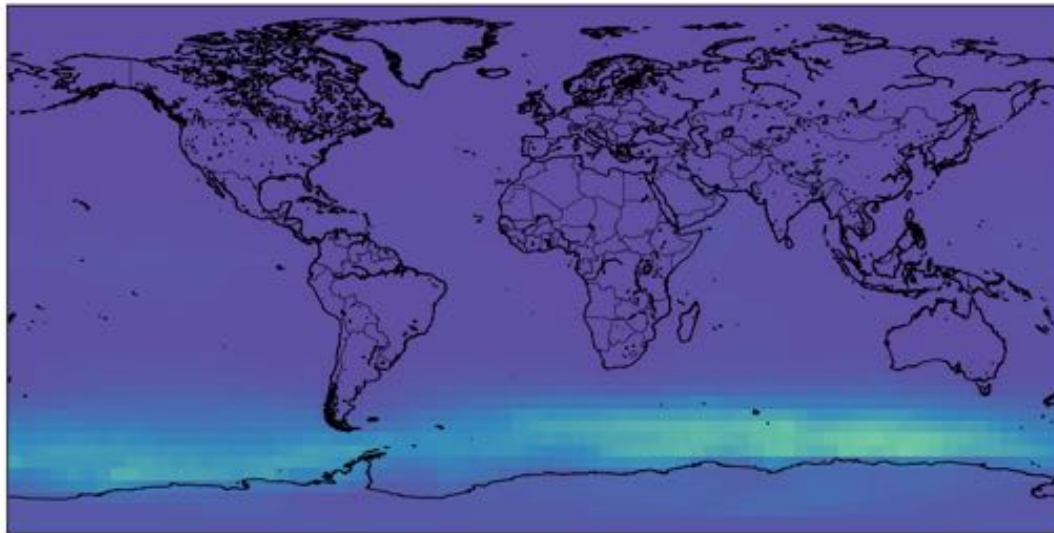
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

Br

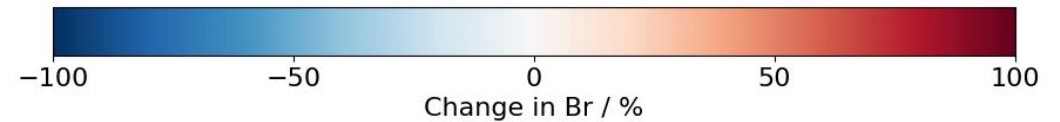
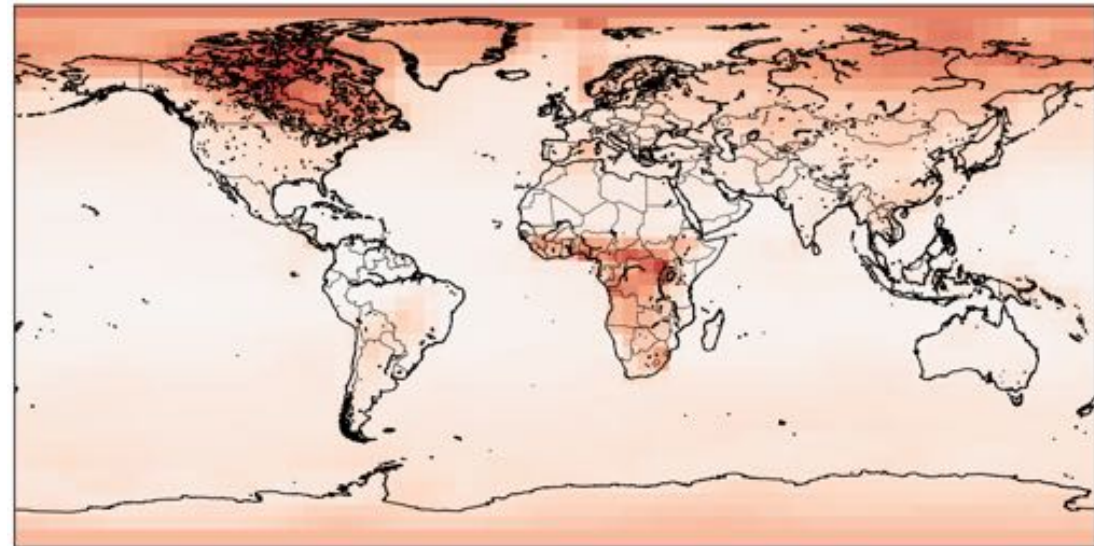
4x5



1x1



Percentage Difference

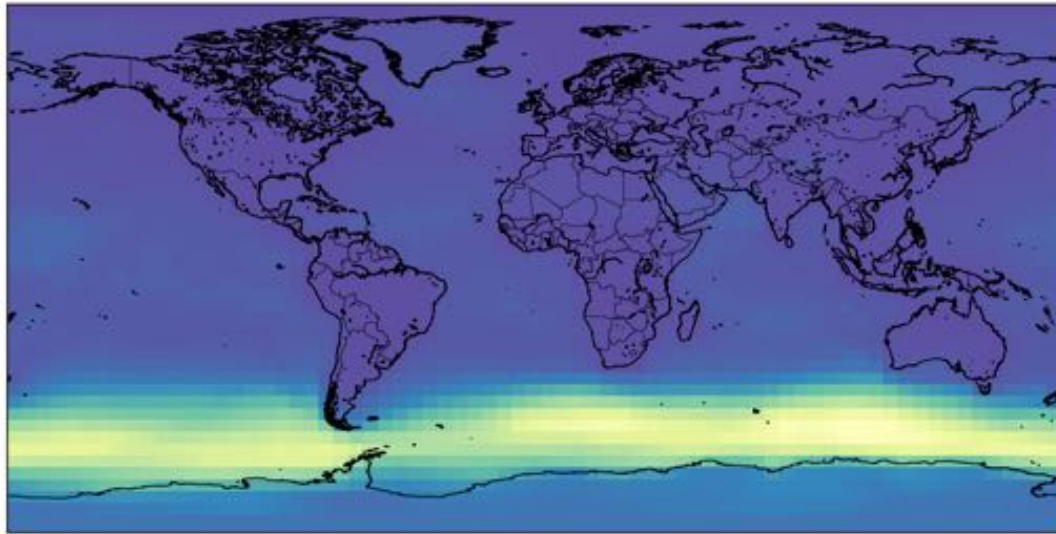


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

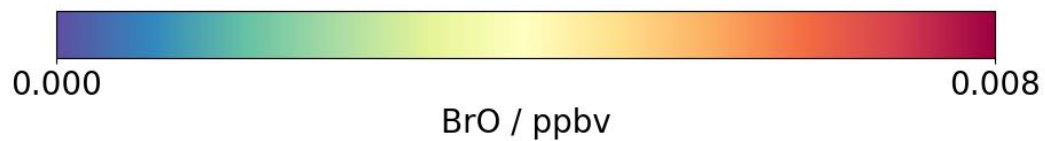
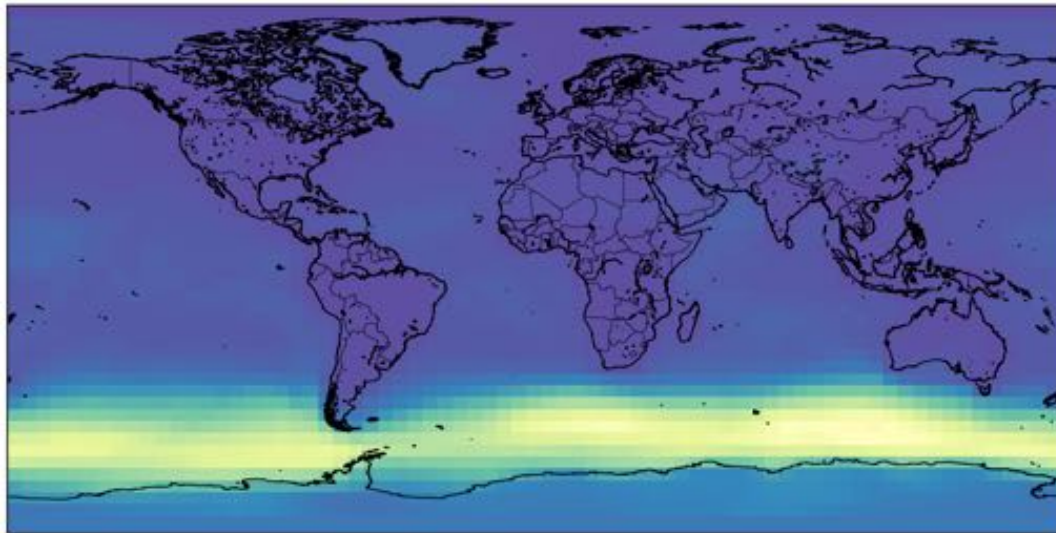
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

BrO

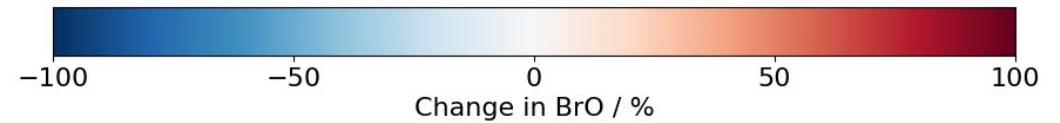
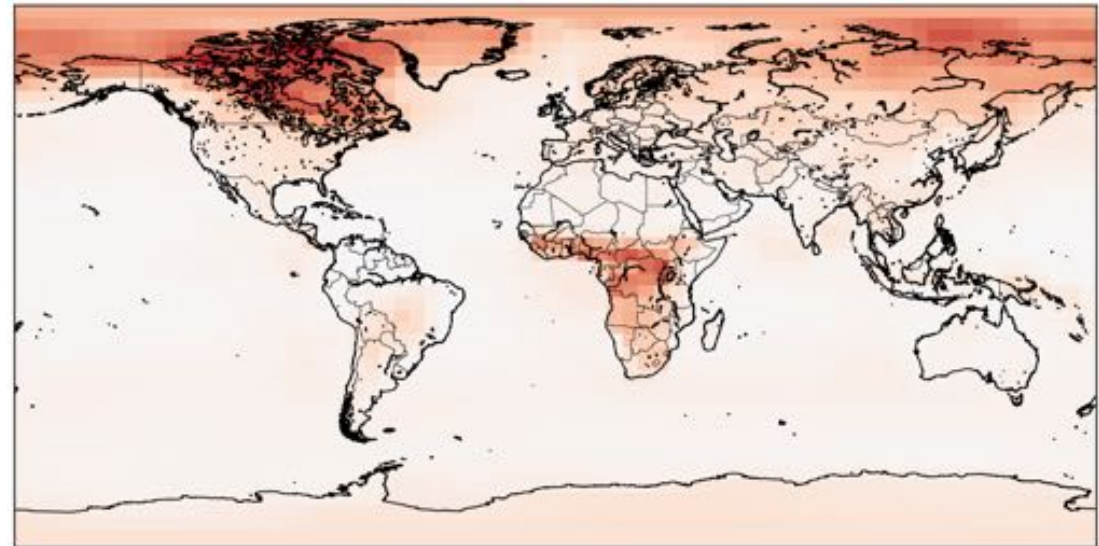
4x5



1x1



Percentage Difference

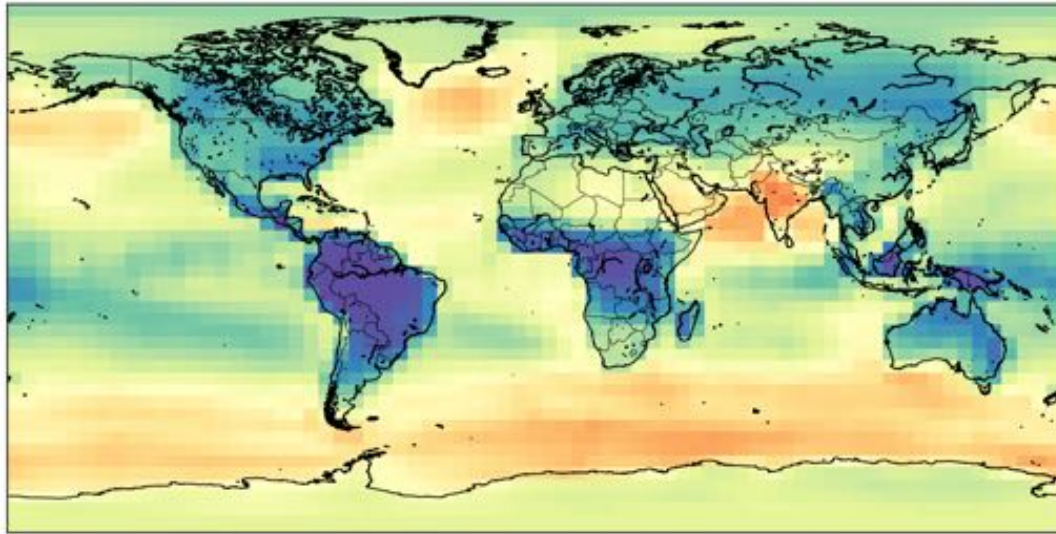


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

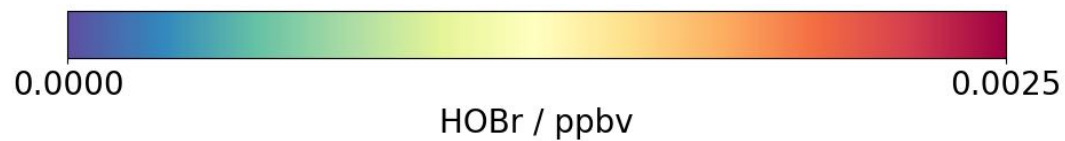
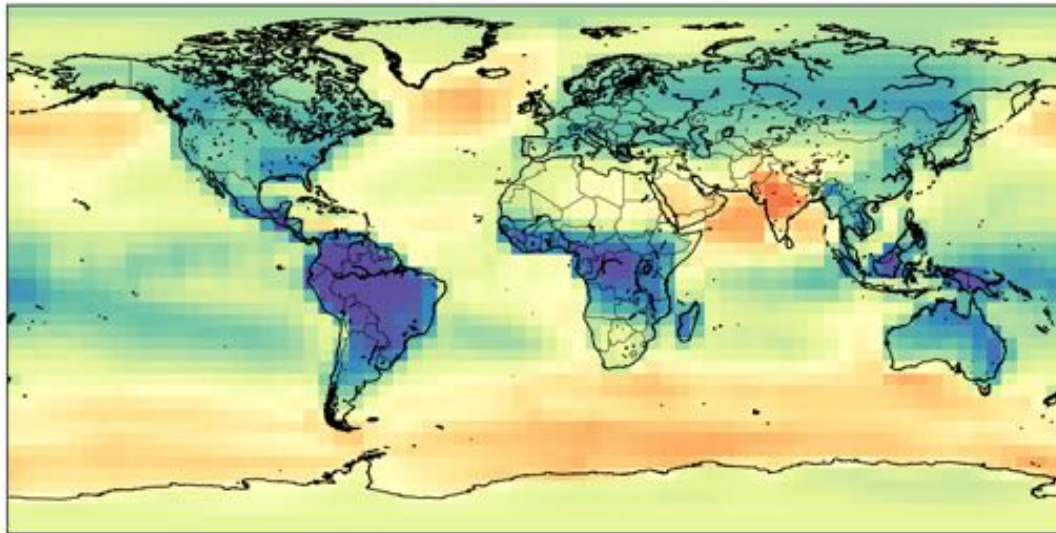
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

HOBr

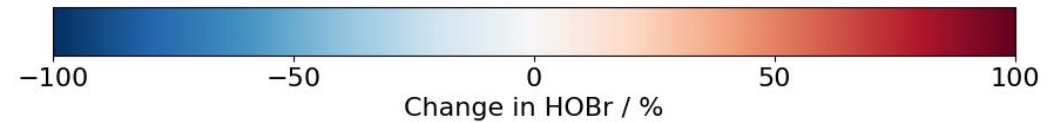
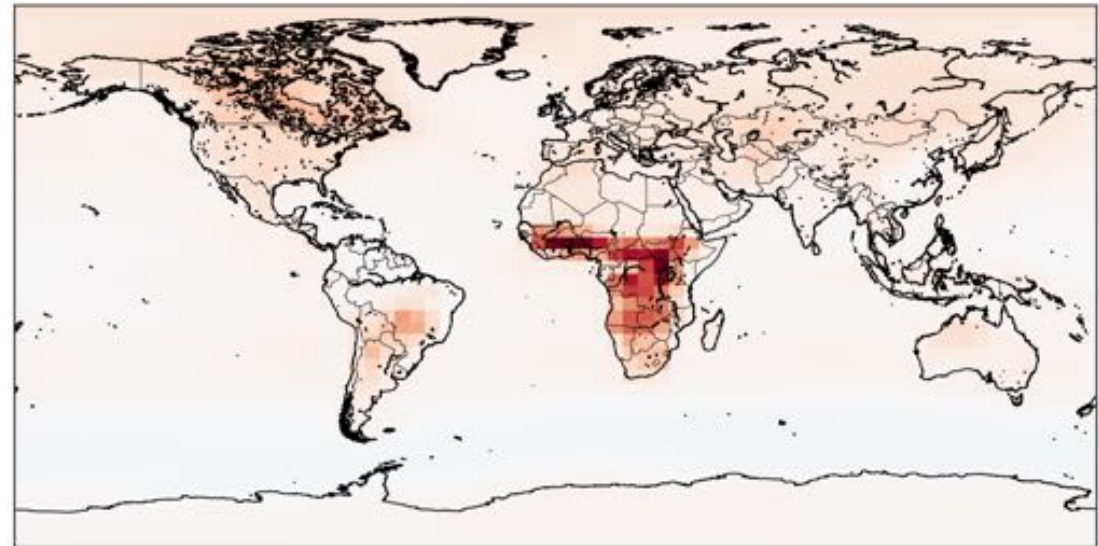
4x5



1x1



Percentage Difference

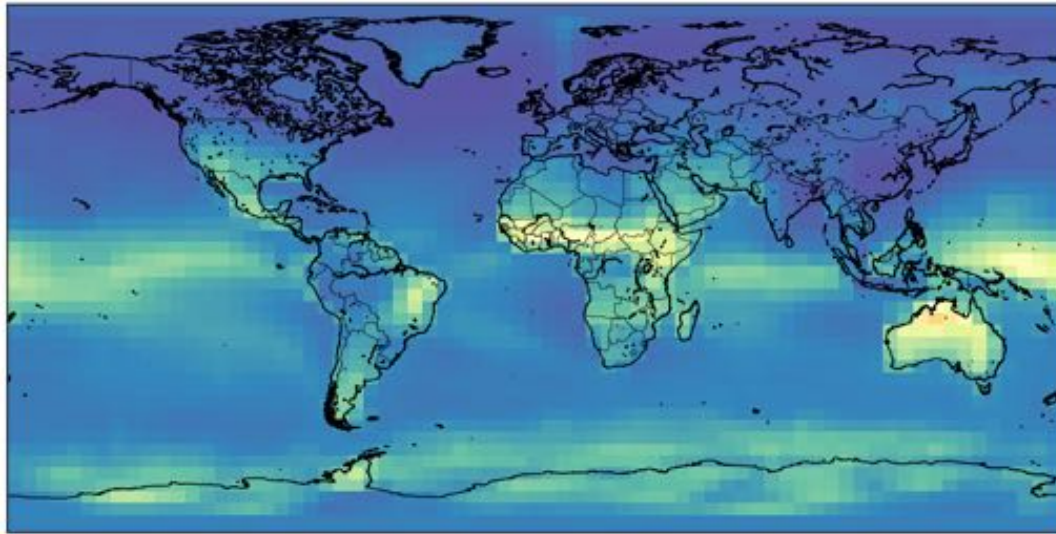


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

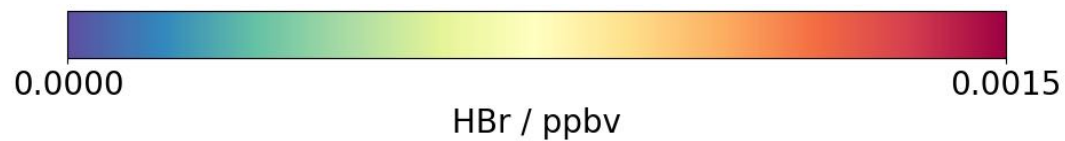
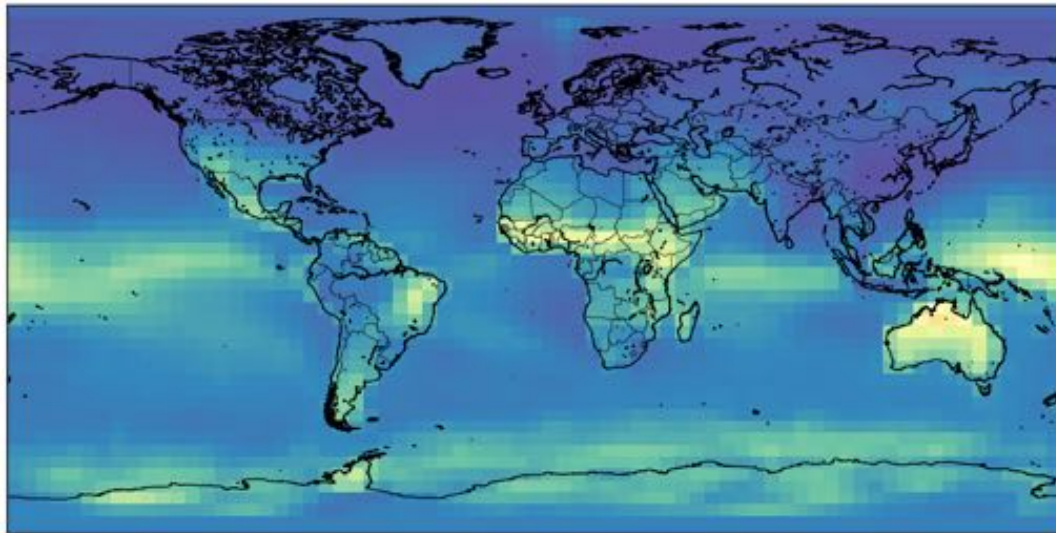
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

HBr

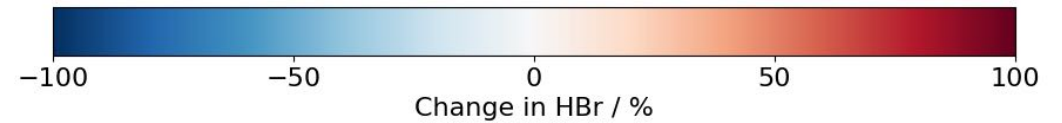
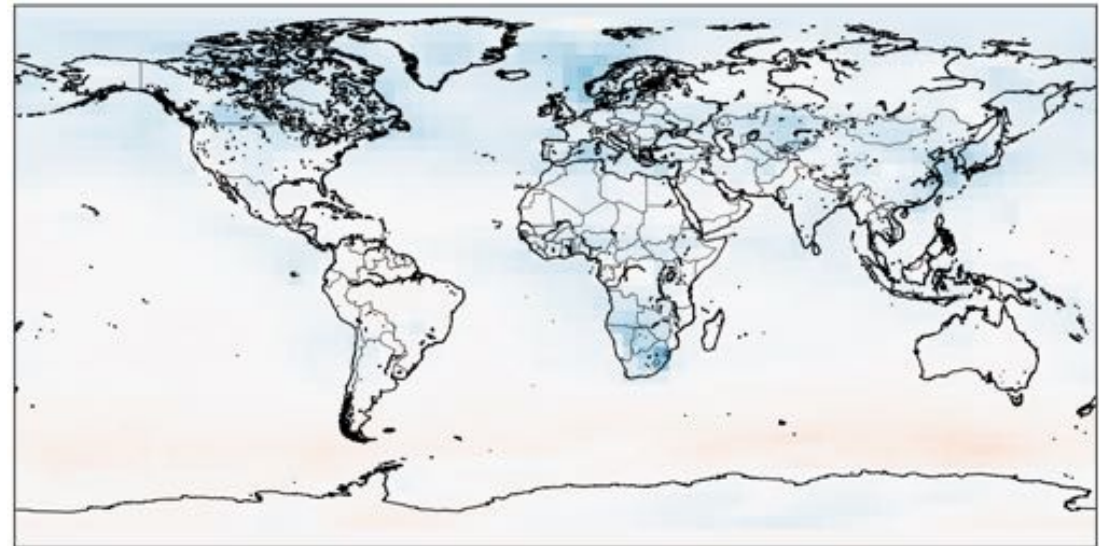
4x5



1x1



Percentage Difference

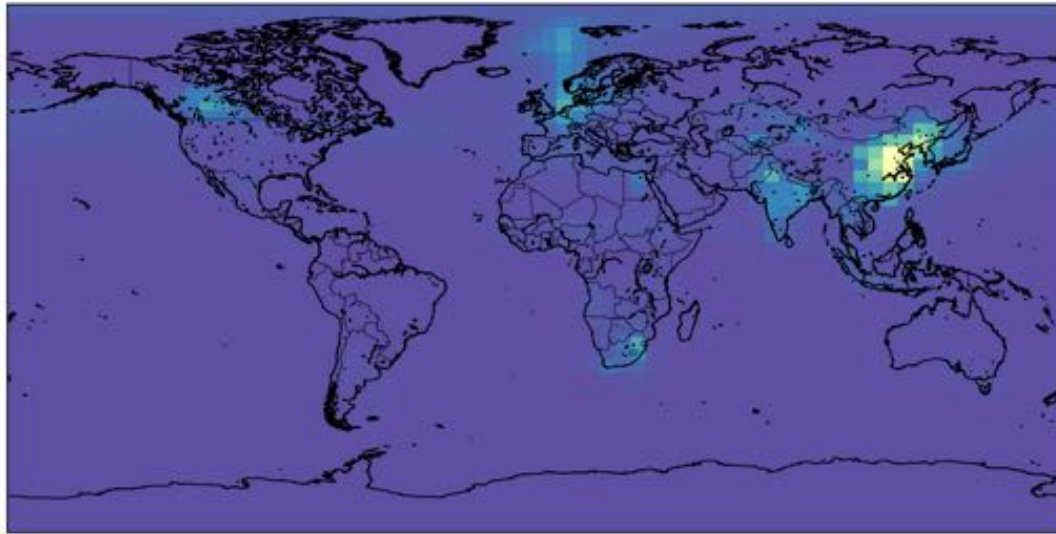


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

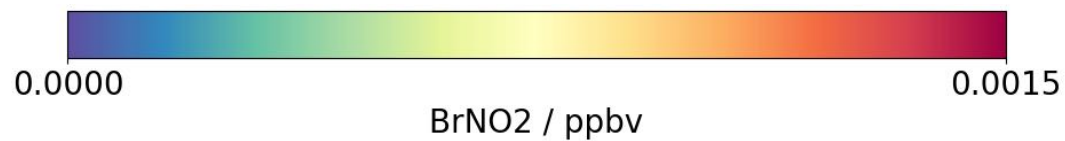
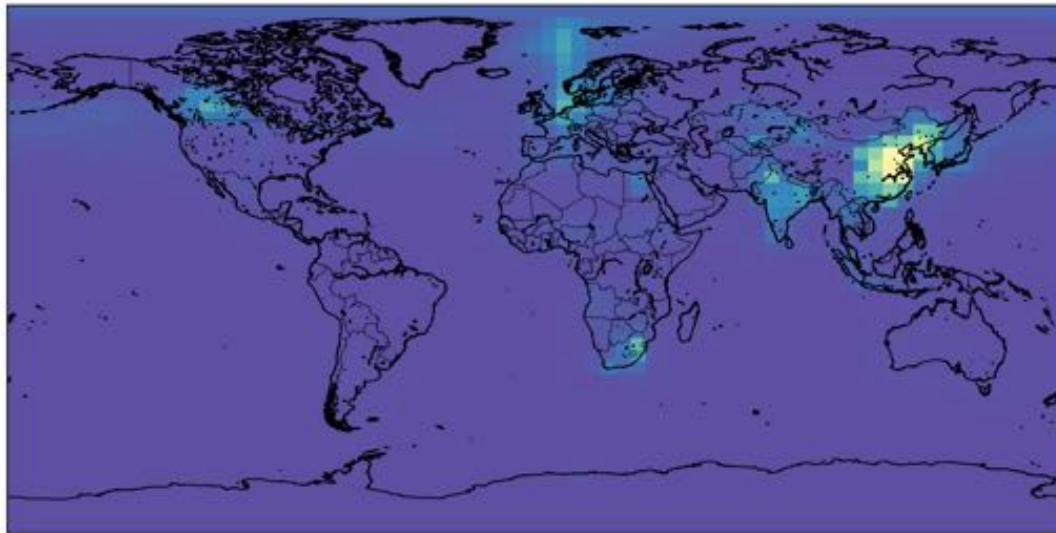
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

BrNO₂

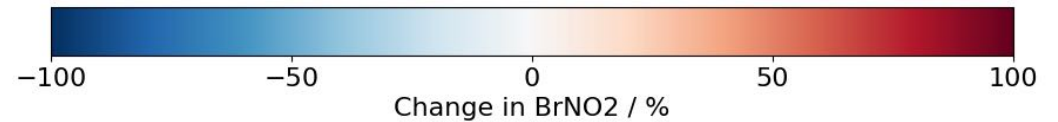
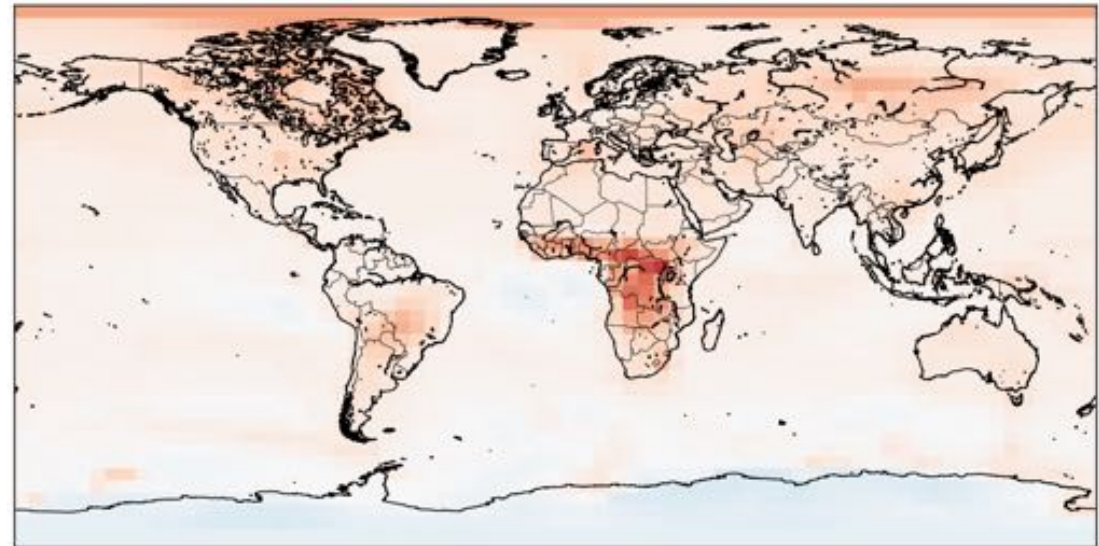
4x5



1x1



Percentage Difference

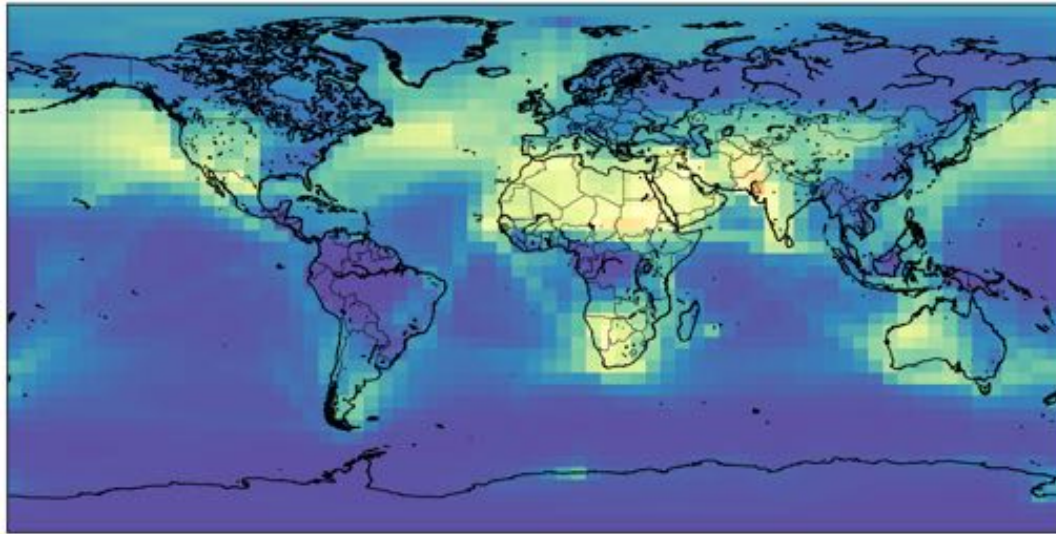


Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

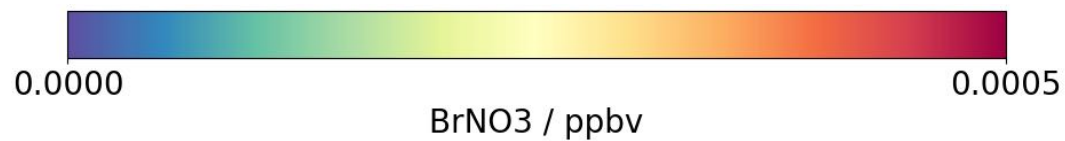
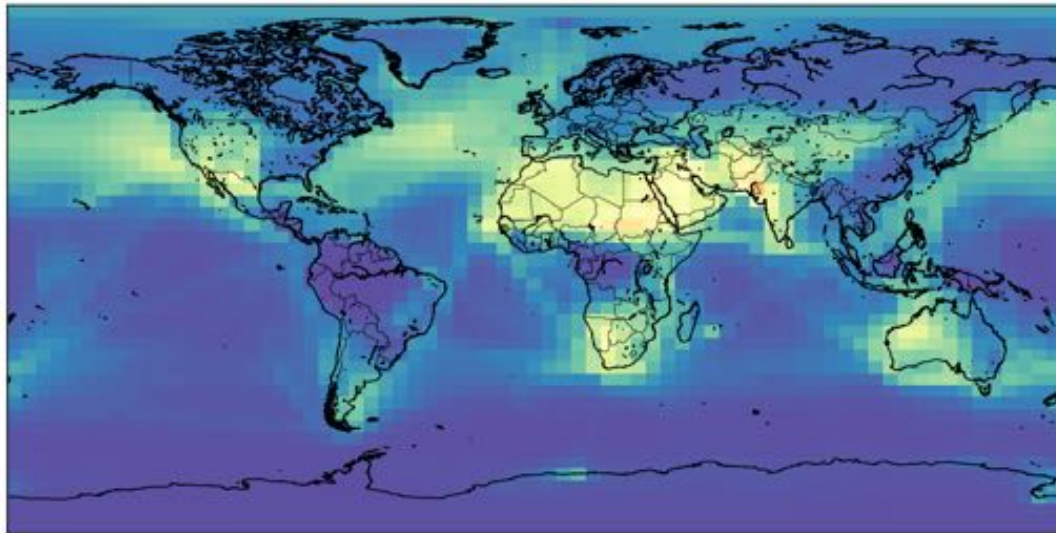
Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions

BrNO₃

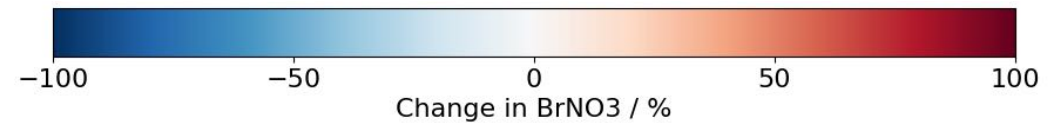
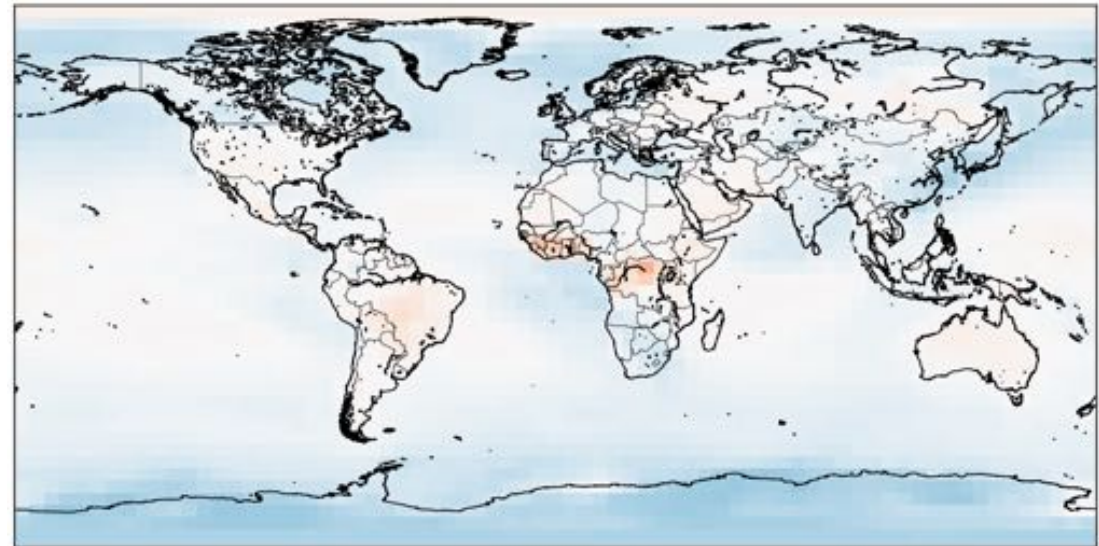
4x5



1x1



Percentage Difference

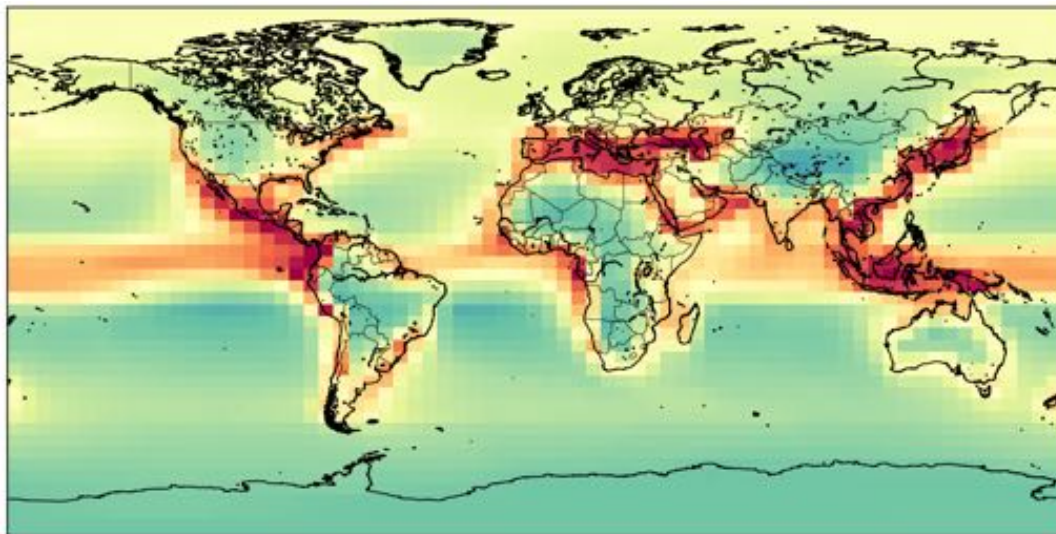


Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

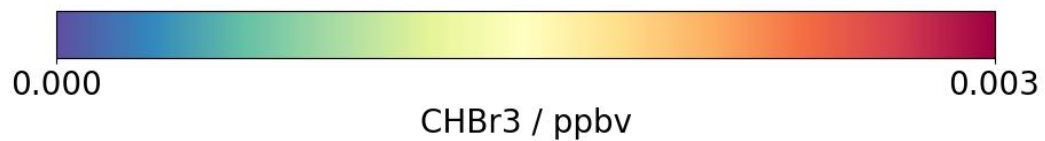
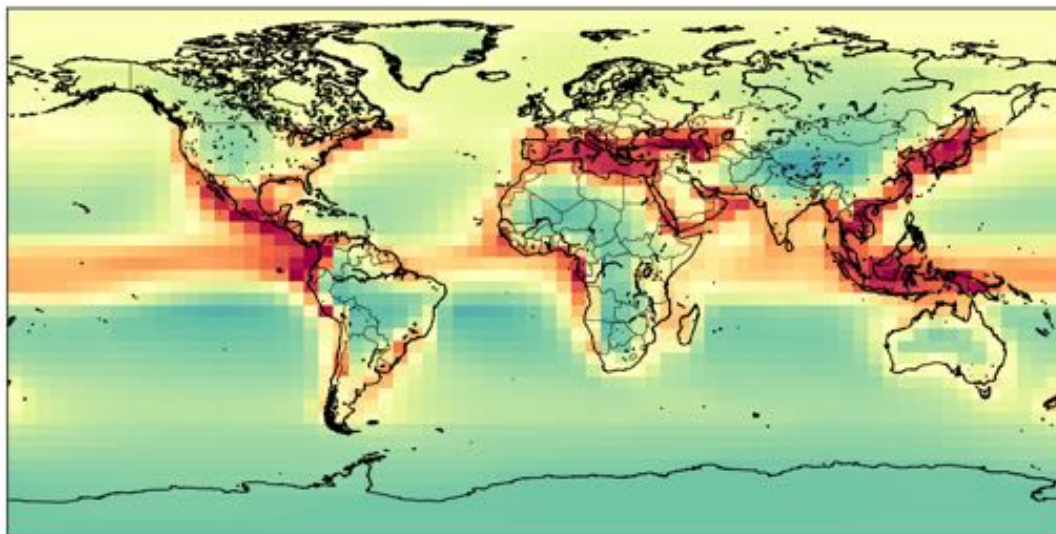
Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions

CHBr3

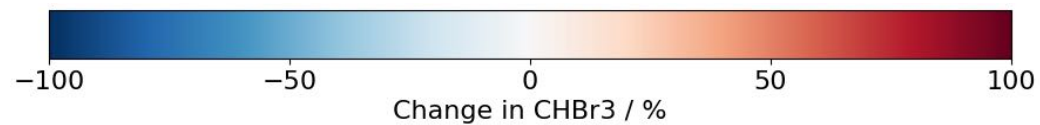
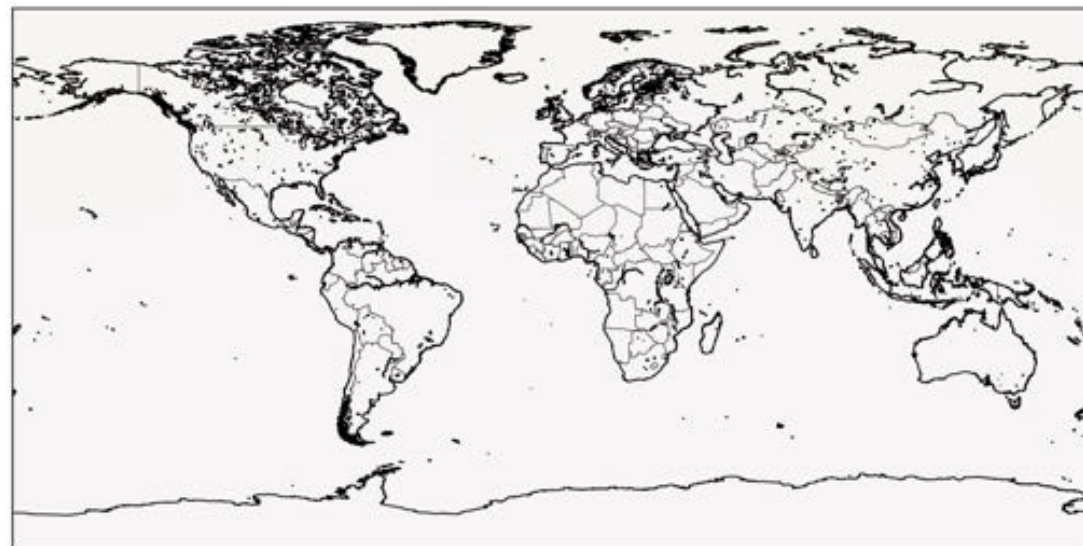
4x5



1x1



Percentage Difference

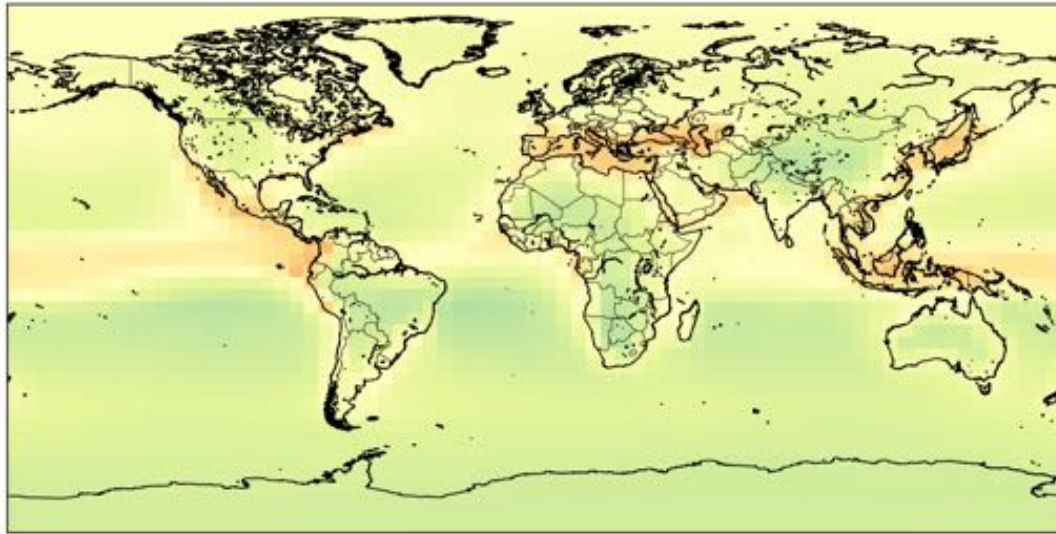


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

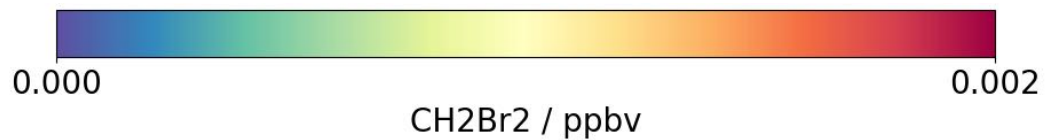
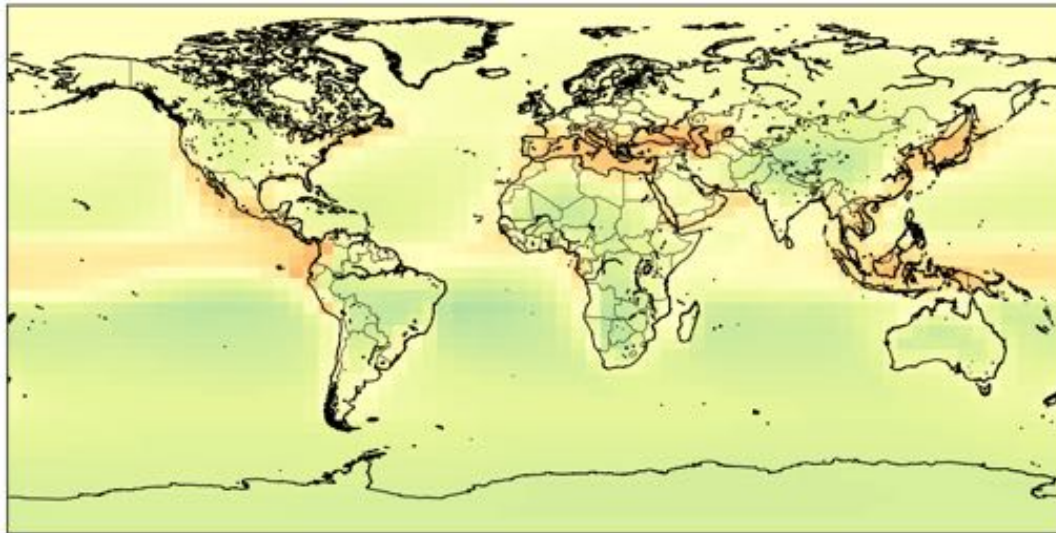
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

CH₂Br₂

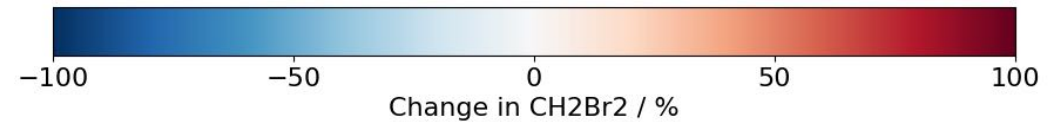
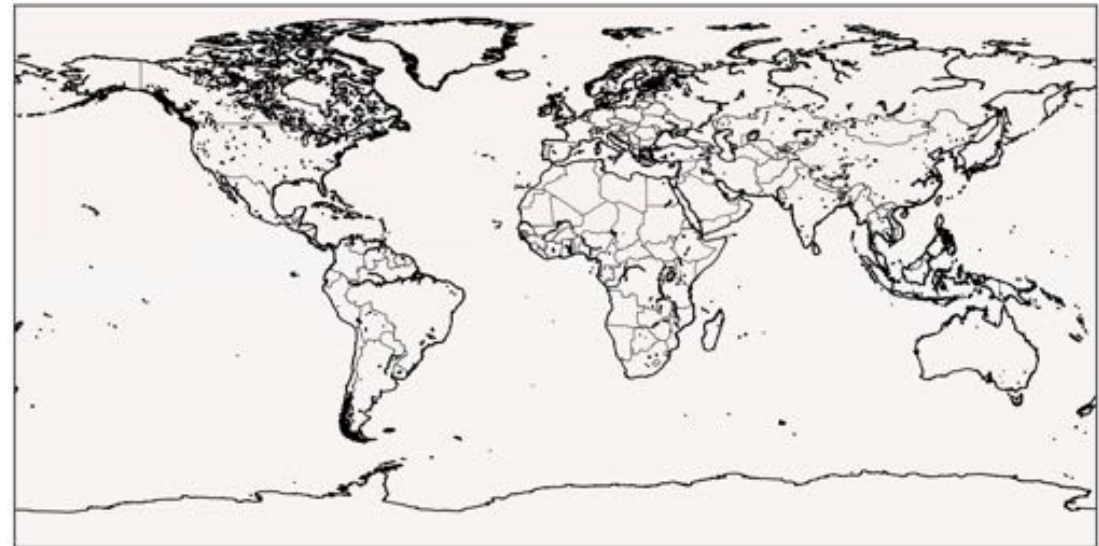
4x5



1x1



Percentage Difference

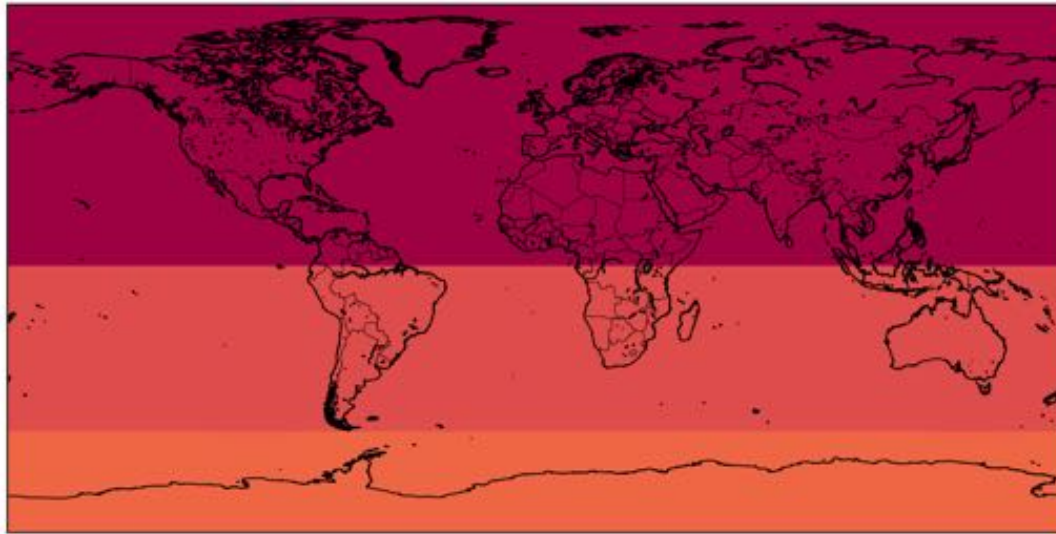


Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

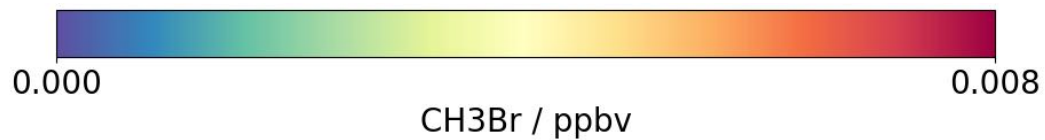
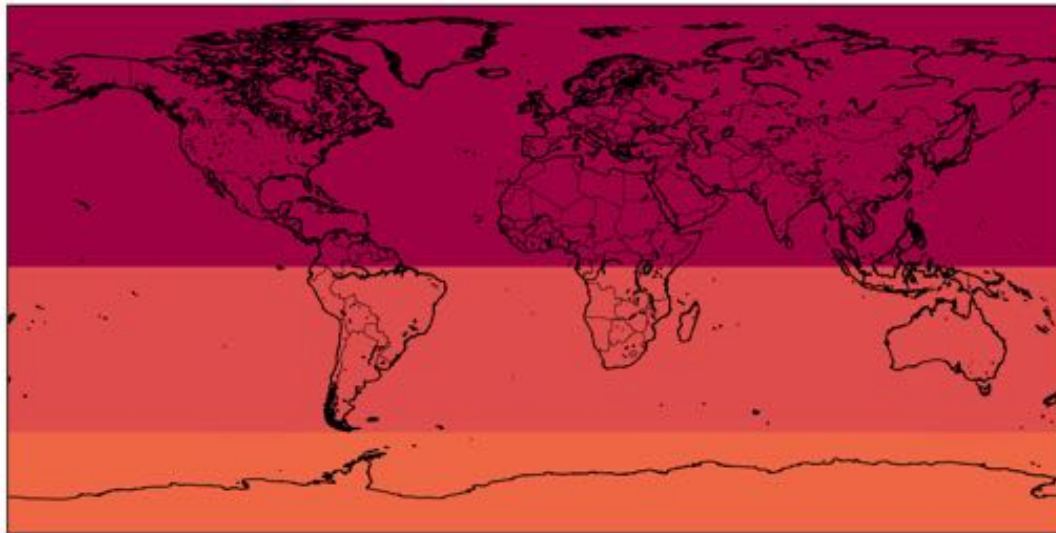
Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions

CH₃Br

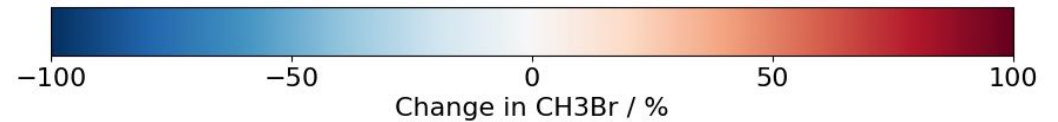
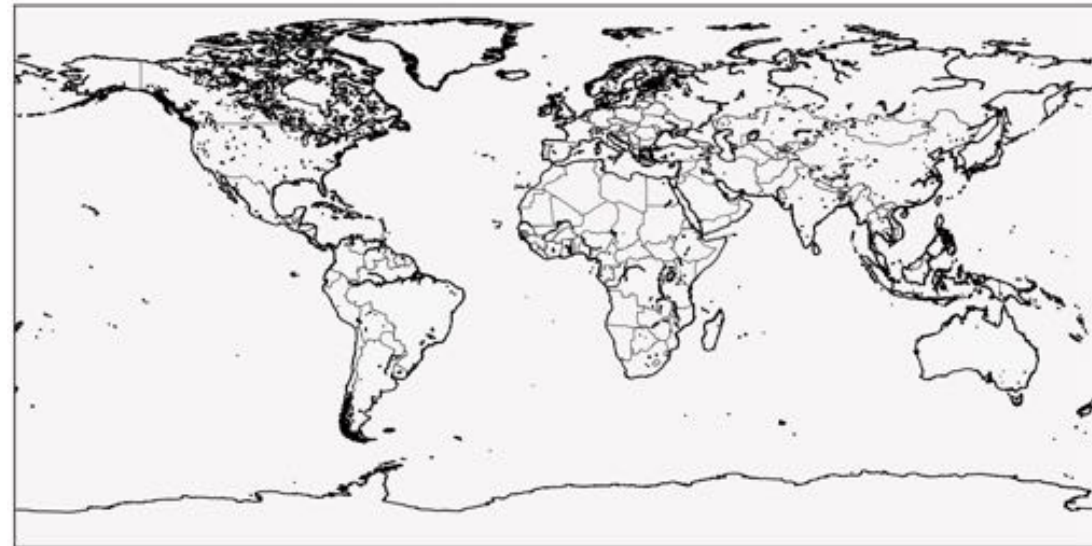
4x5



1x1



Percentage Difference

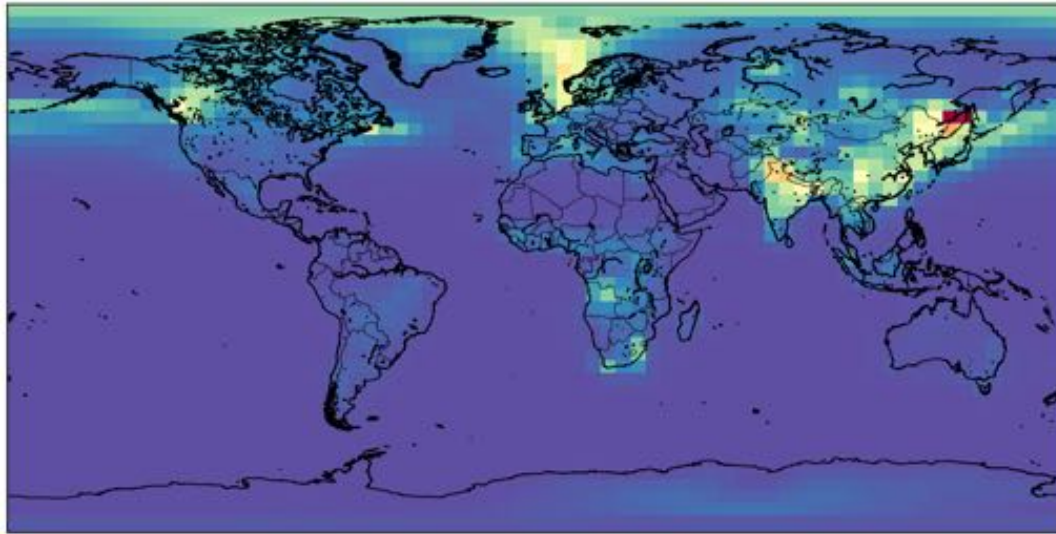


Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

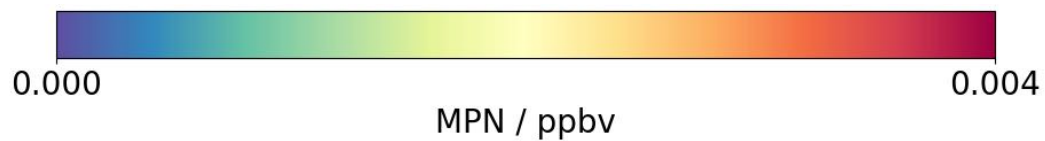
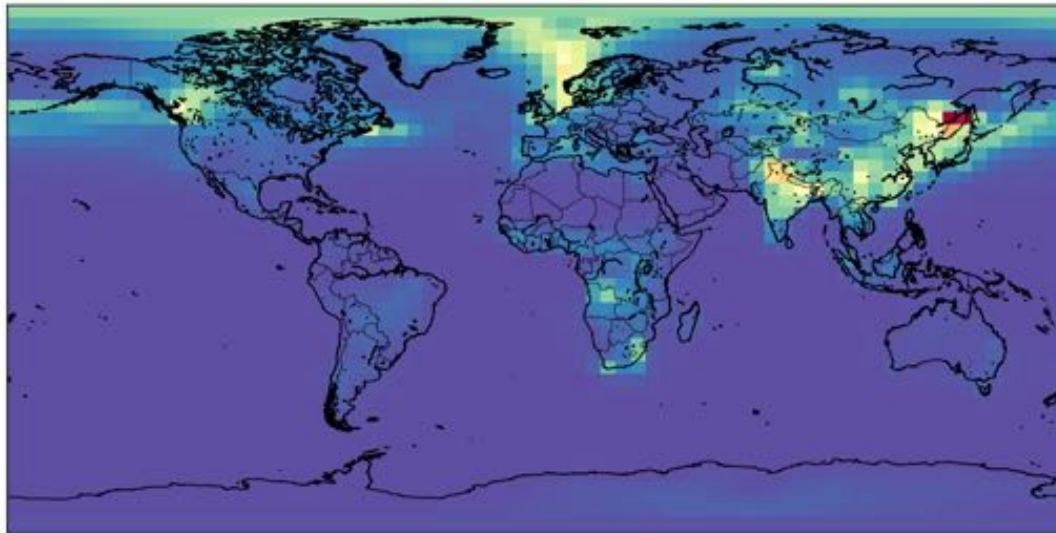
Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions

MPN

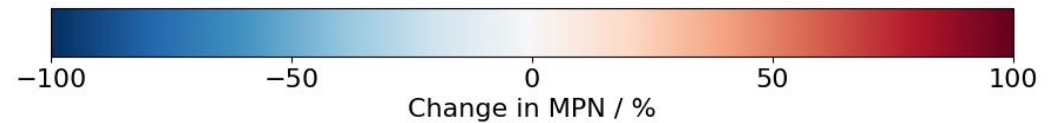
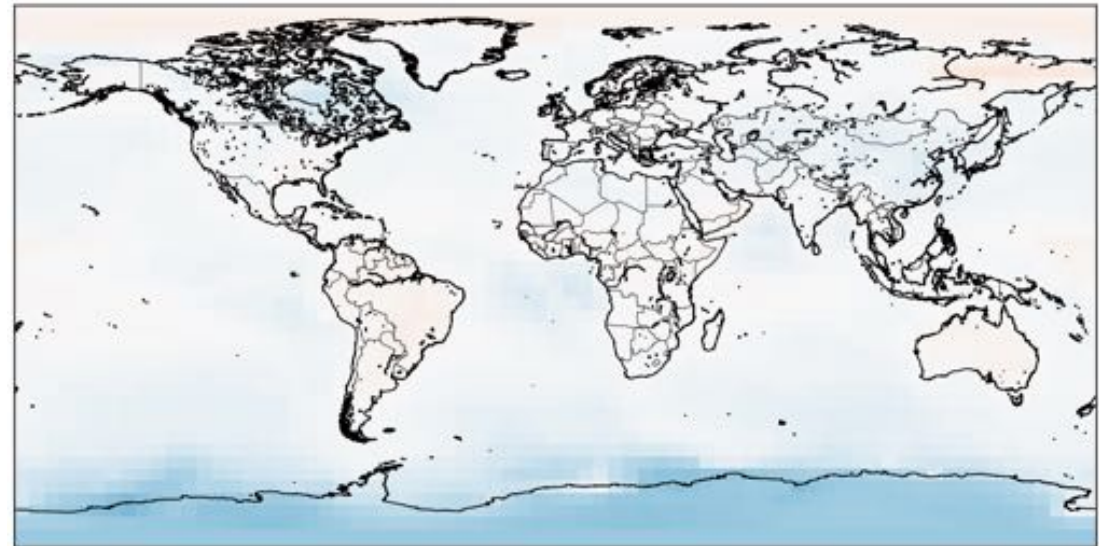
4x5



1x1



Percentage Difference

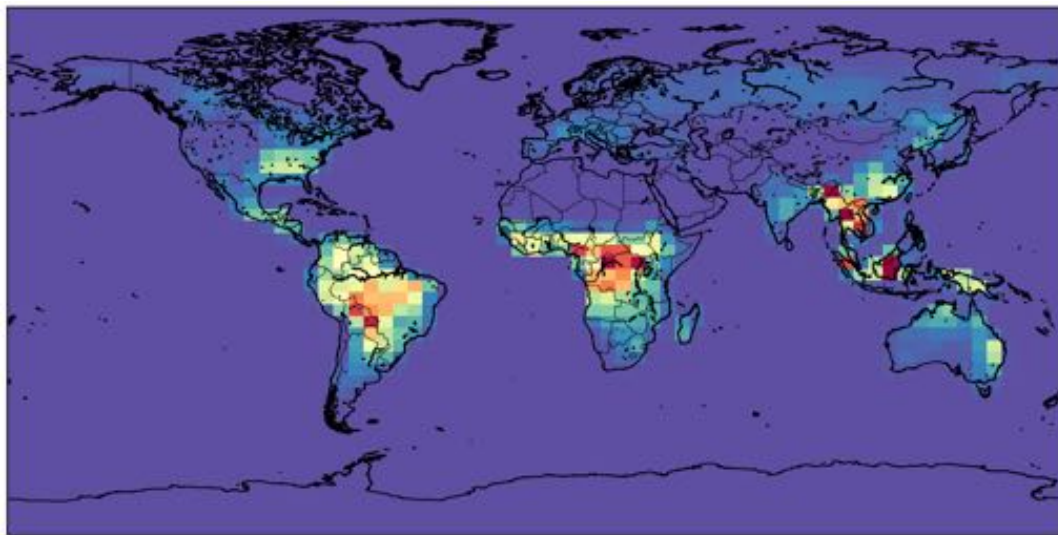


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

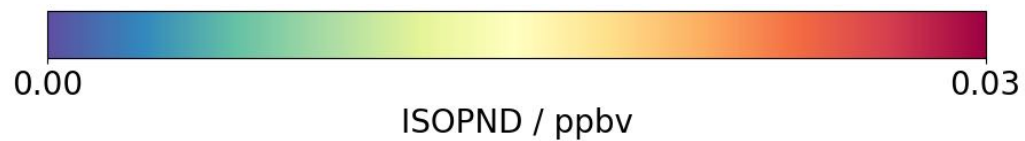
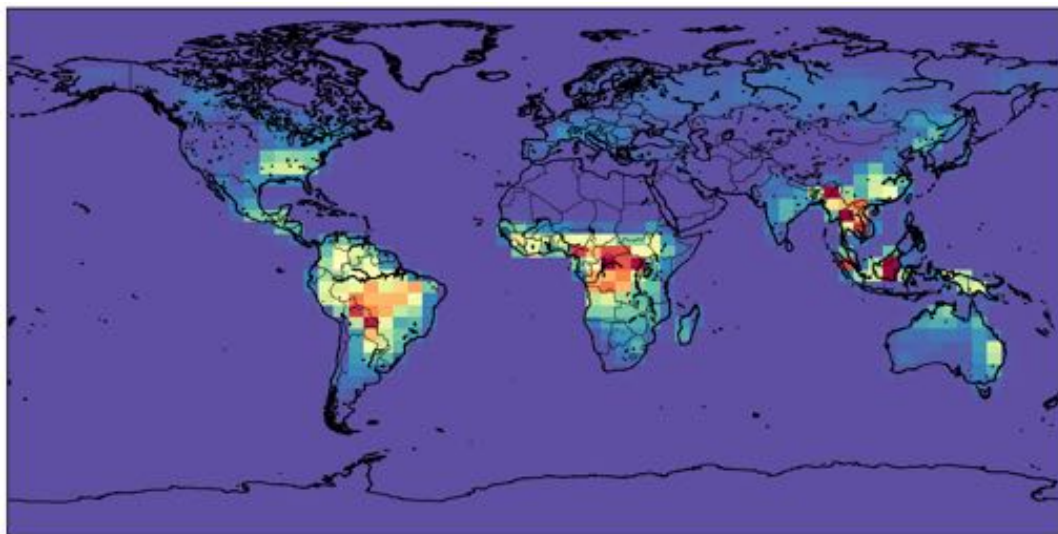
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

ISOPND

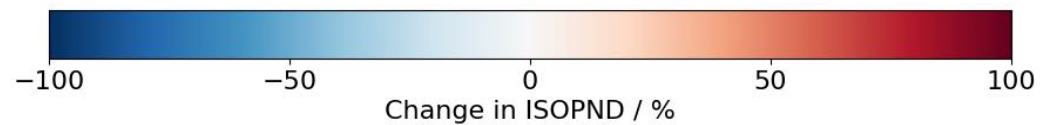
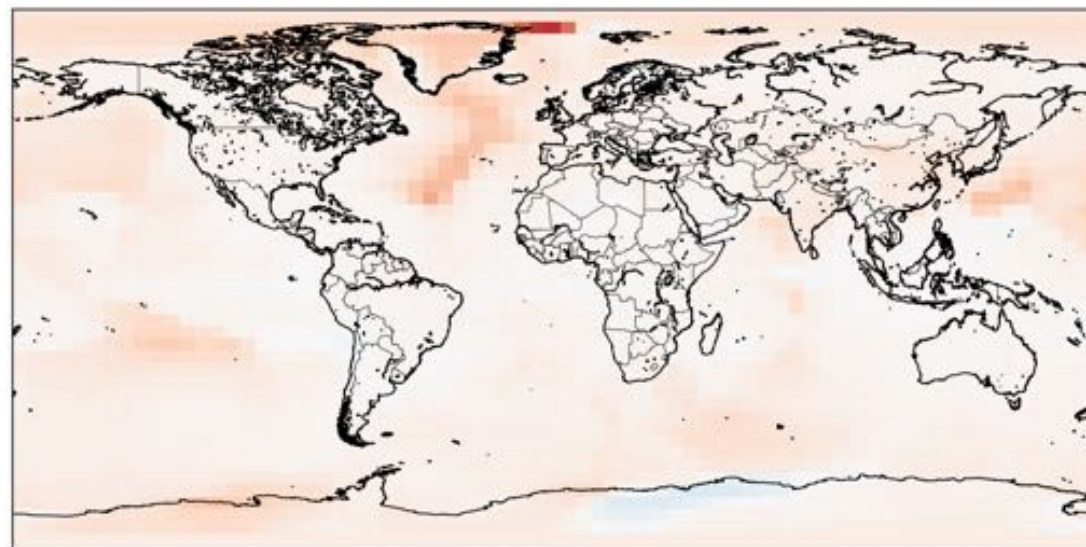
4x5



1x1



Percentage Difference

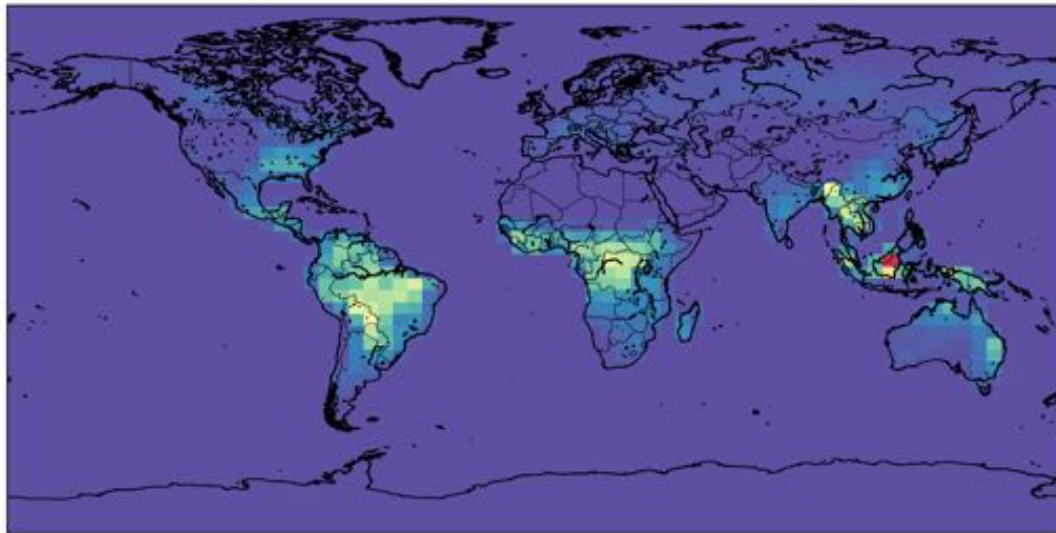


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

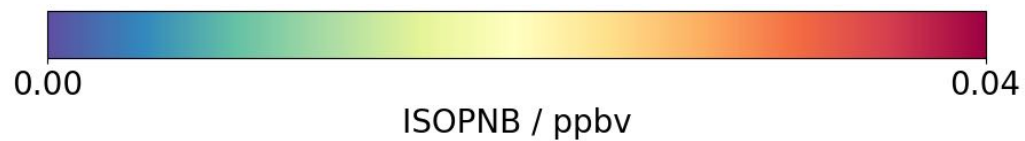
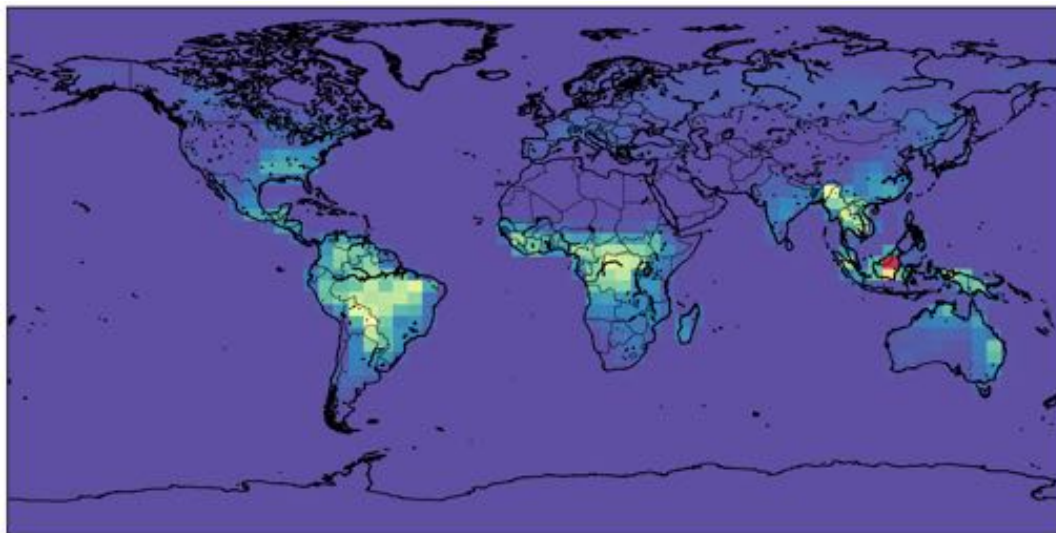
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

ISOPNB

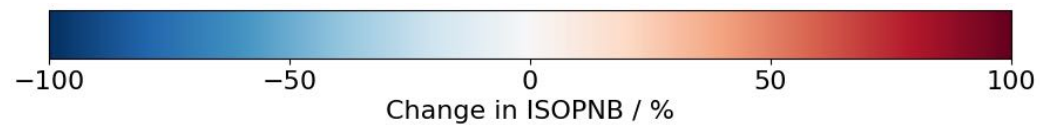
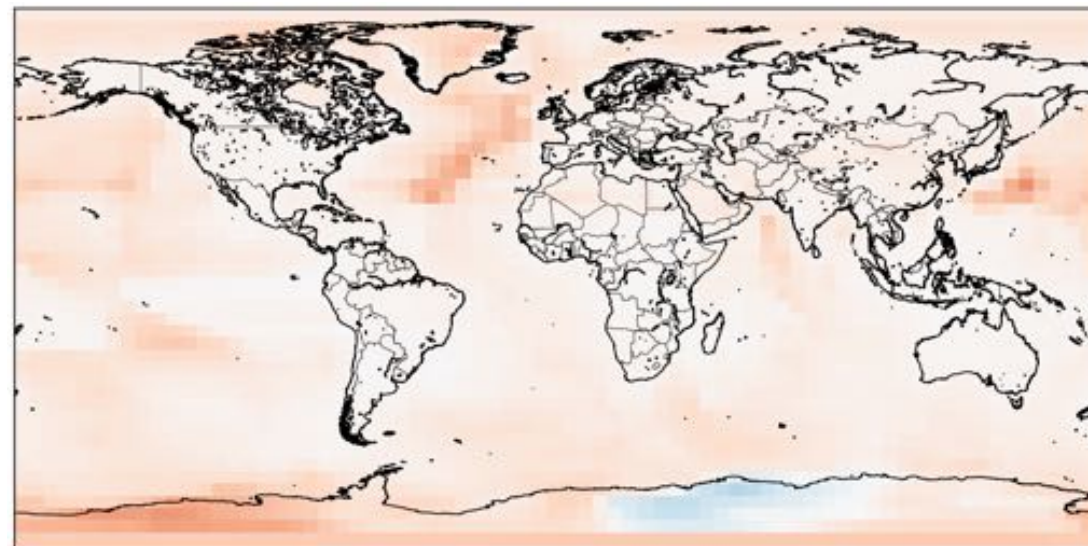
4x5



1x1



Percentage Difference

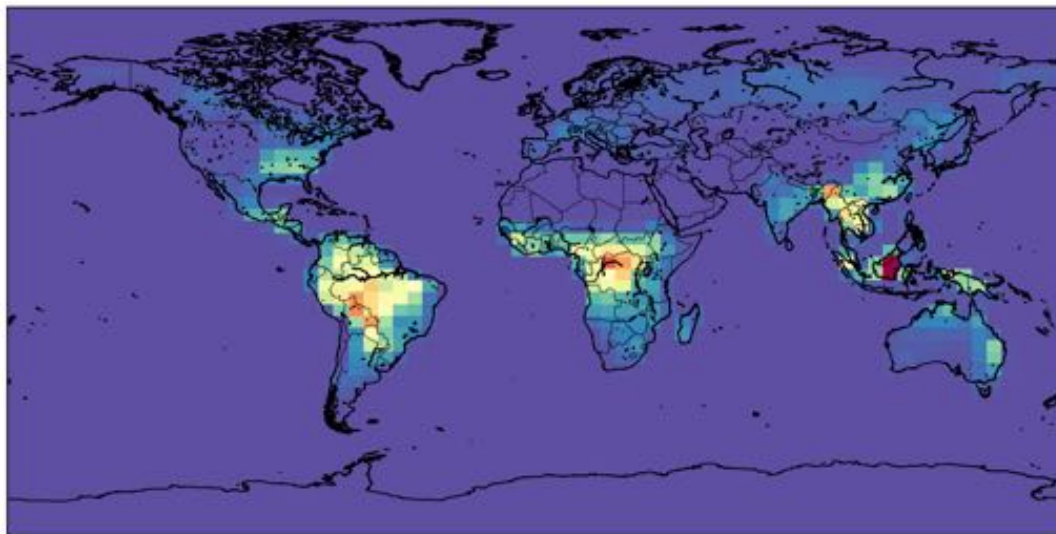


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

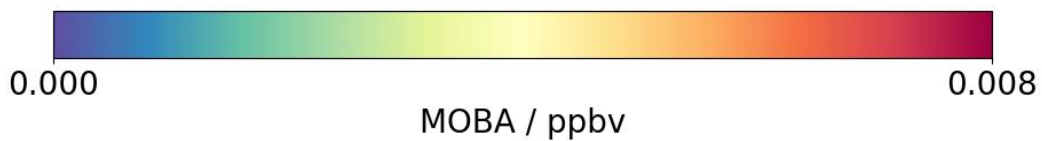
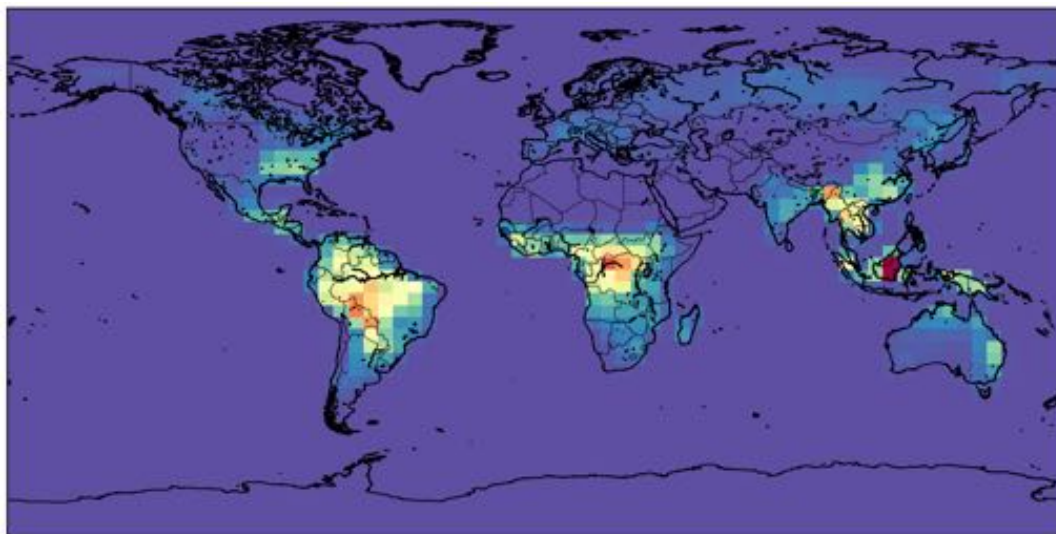
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

MOBA

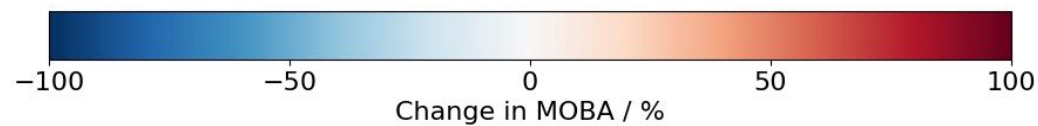
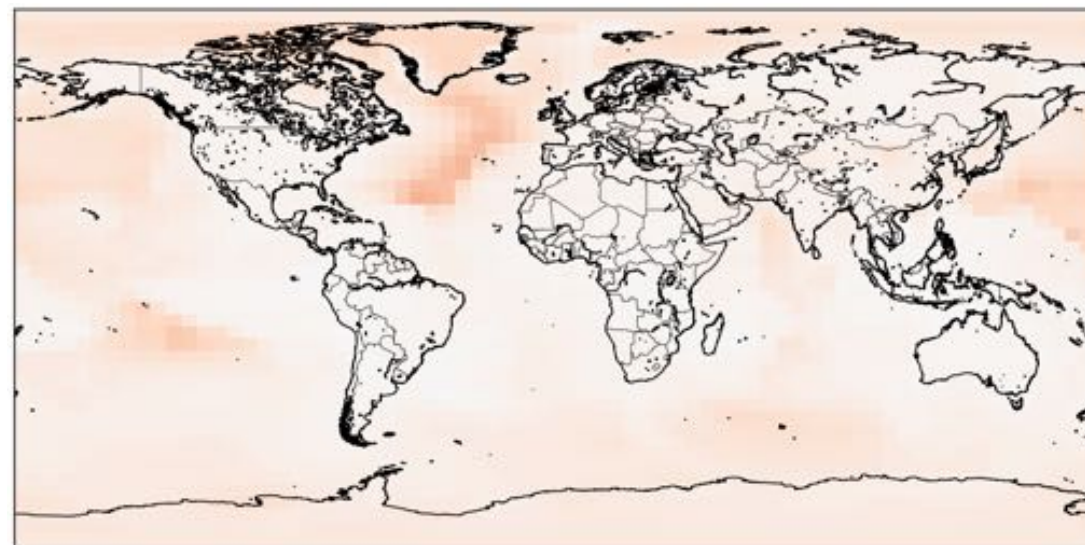
4x5



1x1



Percentage Difference

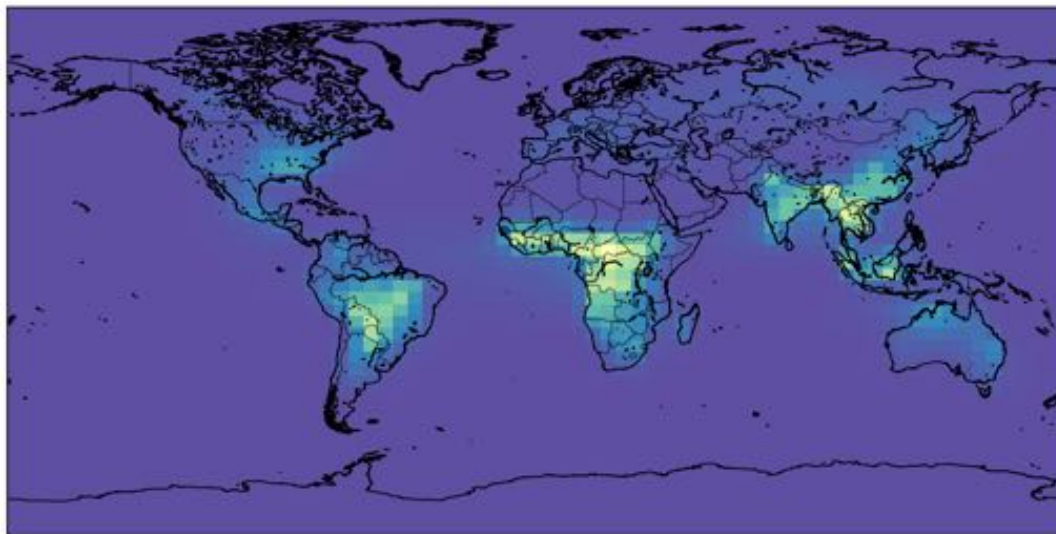


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

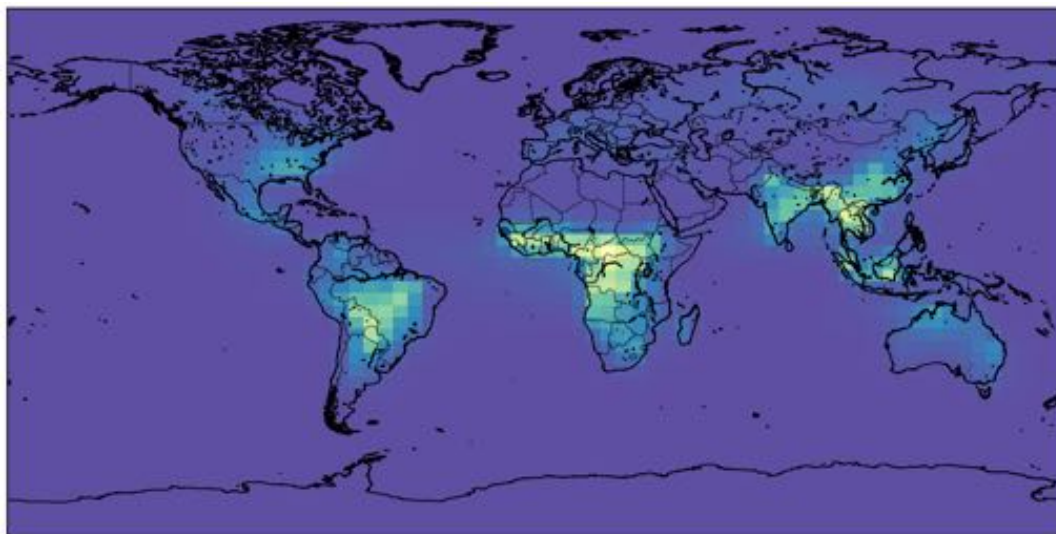
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

PROPNN

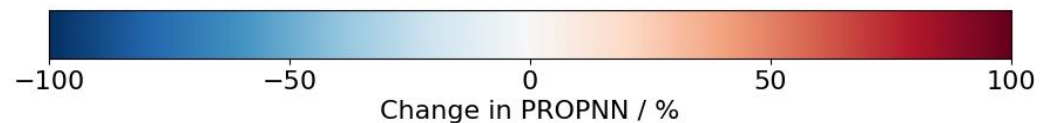
4x5



1x1



Percentage Difference

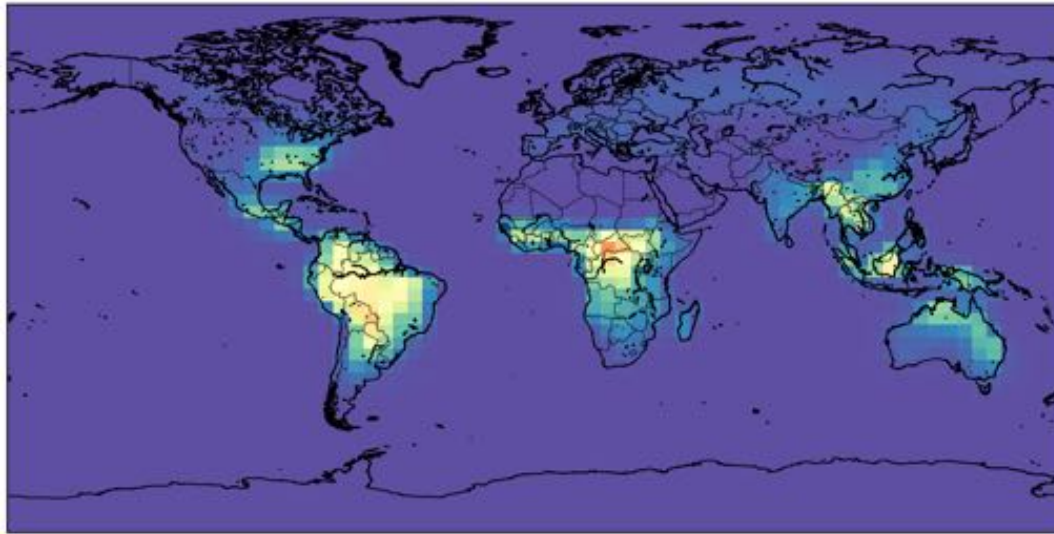


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

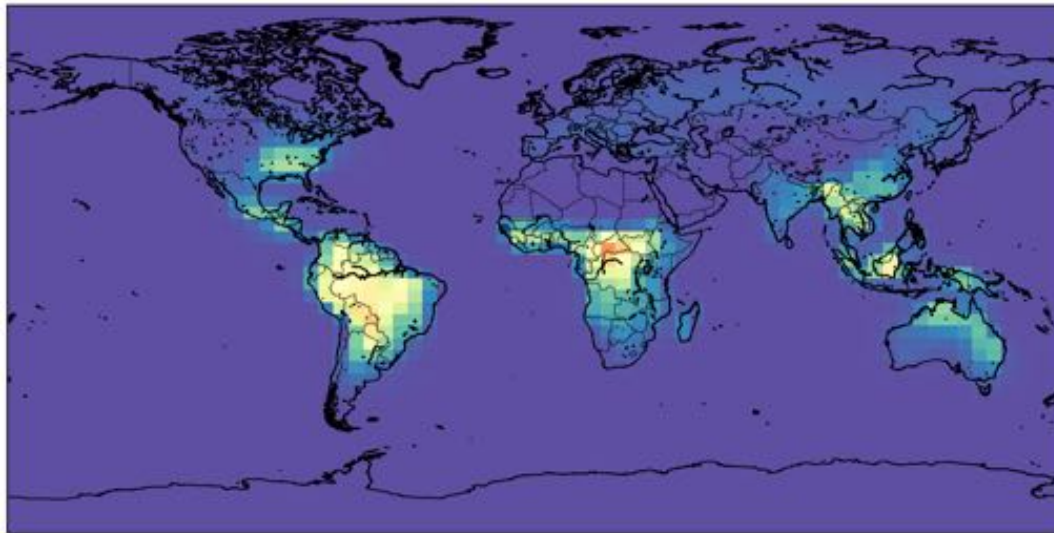
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

HAC

4x5

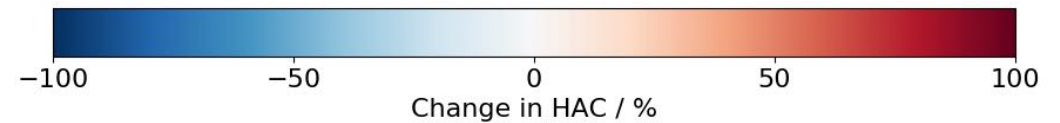
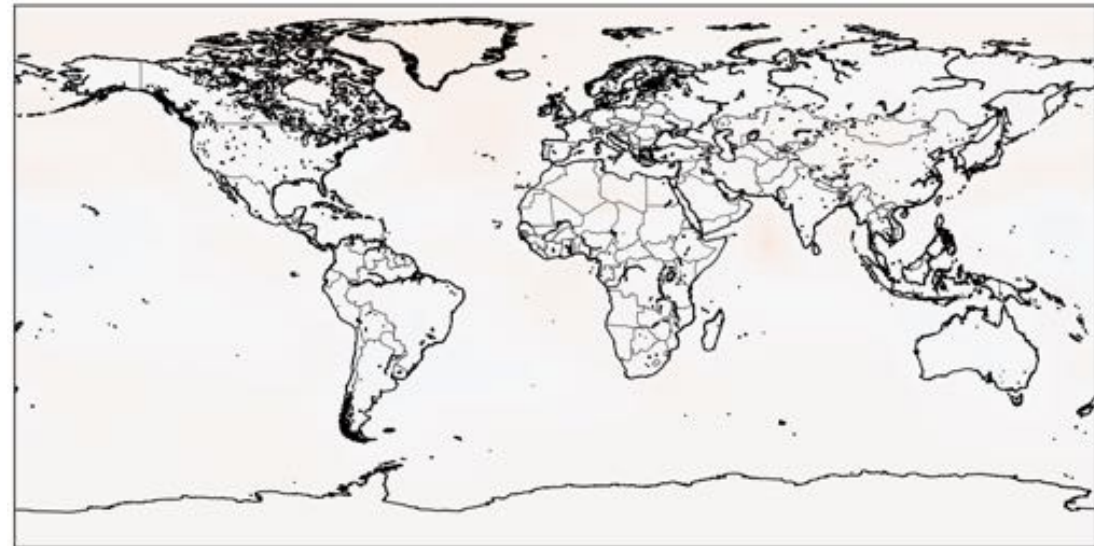


1x1



HAC / ppbv

Percentage Difference

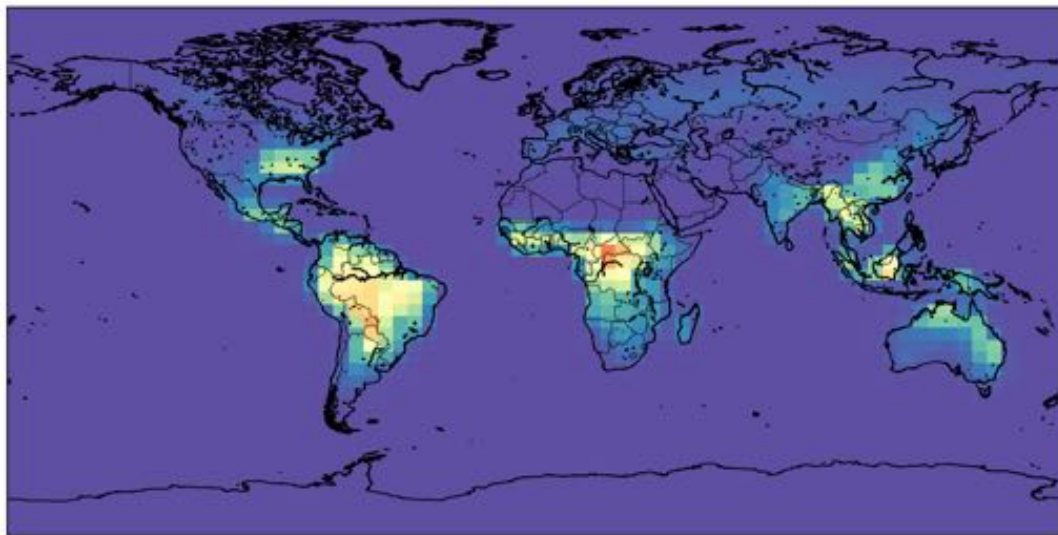


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

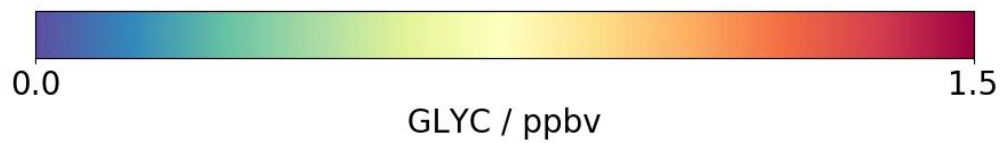
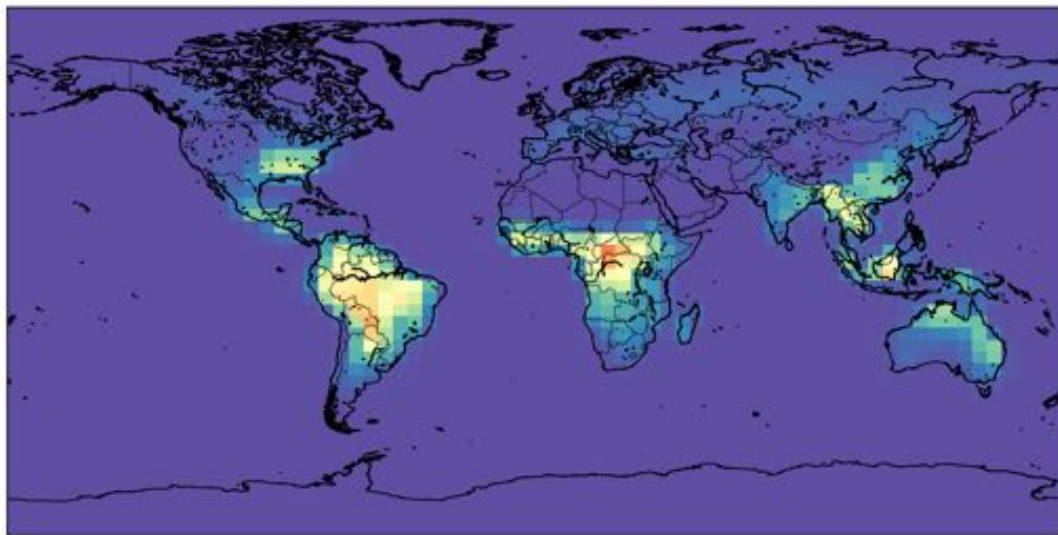
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

GLYC

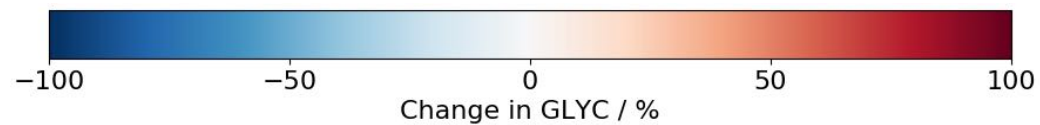
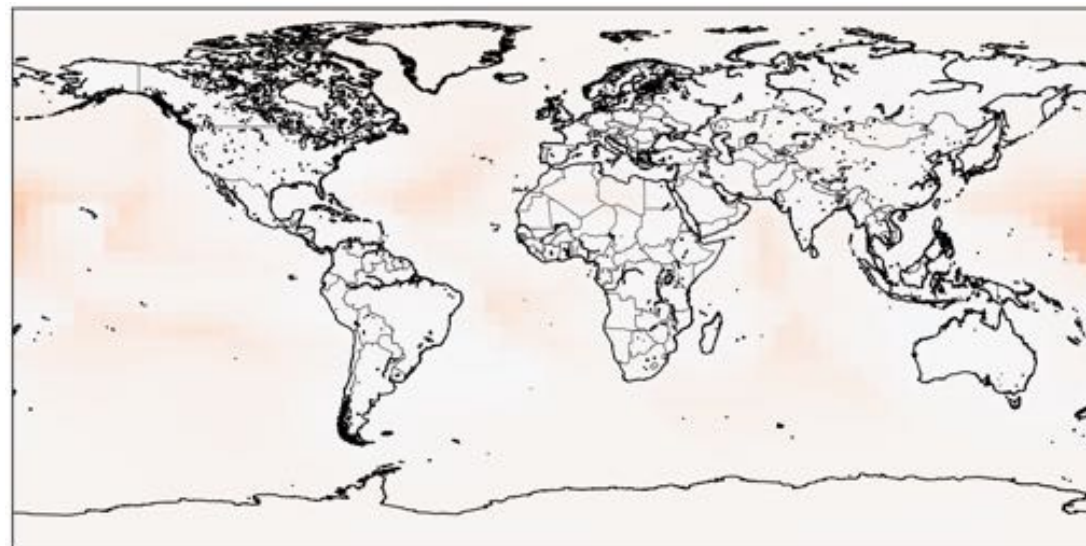
4x5



1x1



Percentage Difference

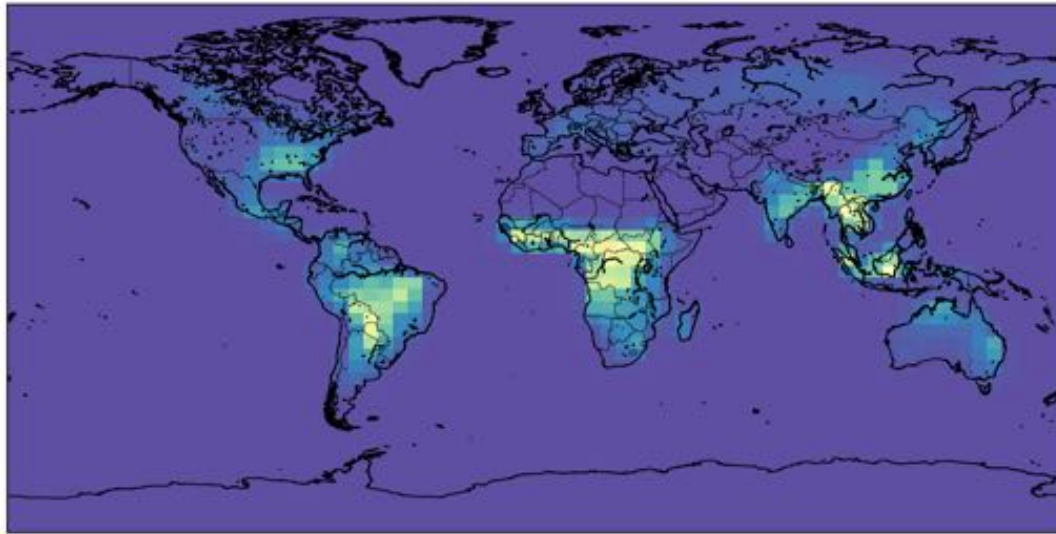


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

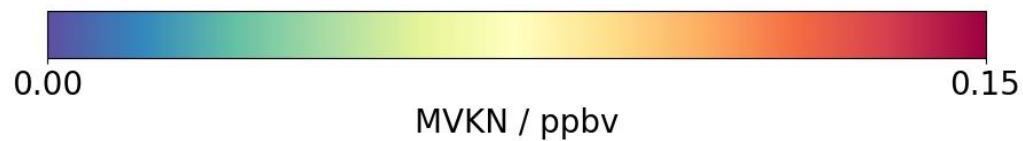
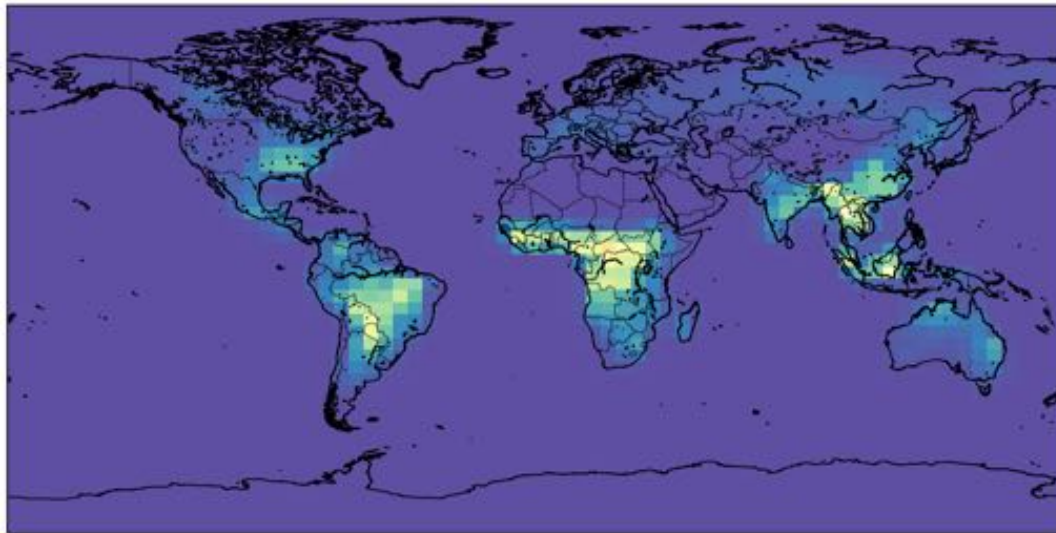
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

MVKN

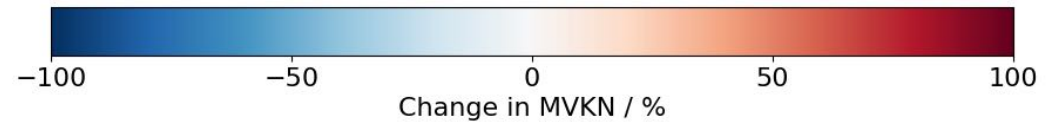
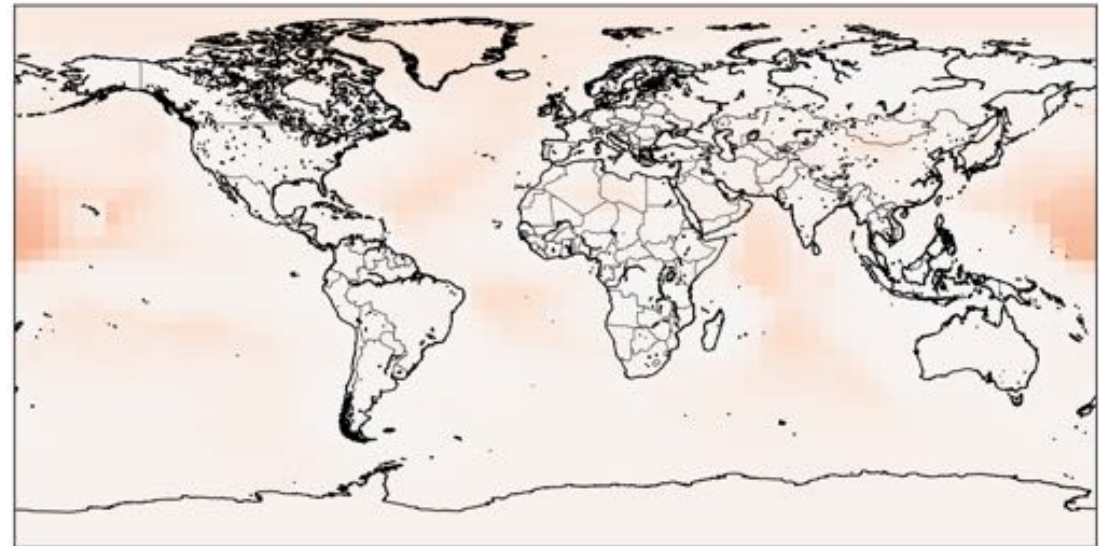
4x5



1x1



Percentage Difference

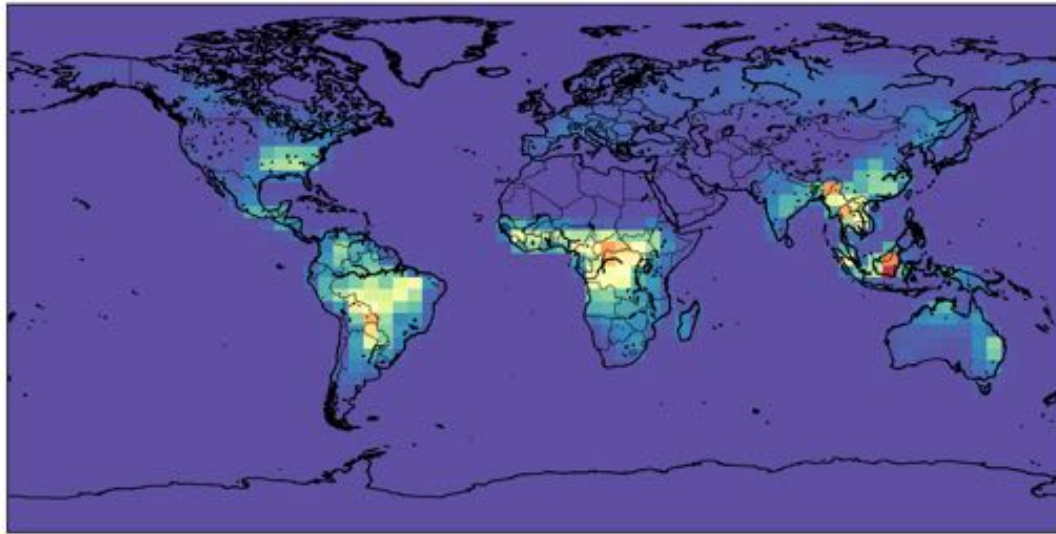


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

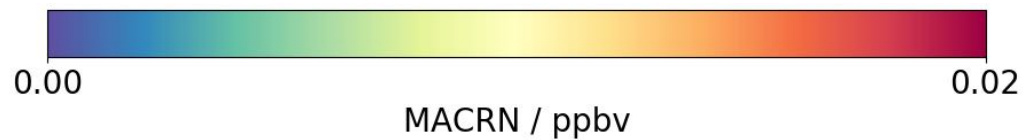
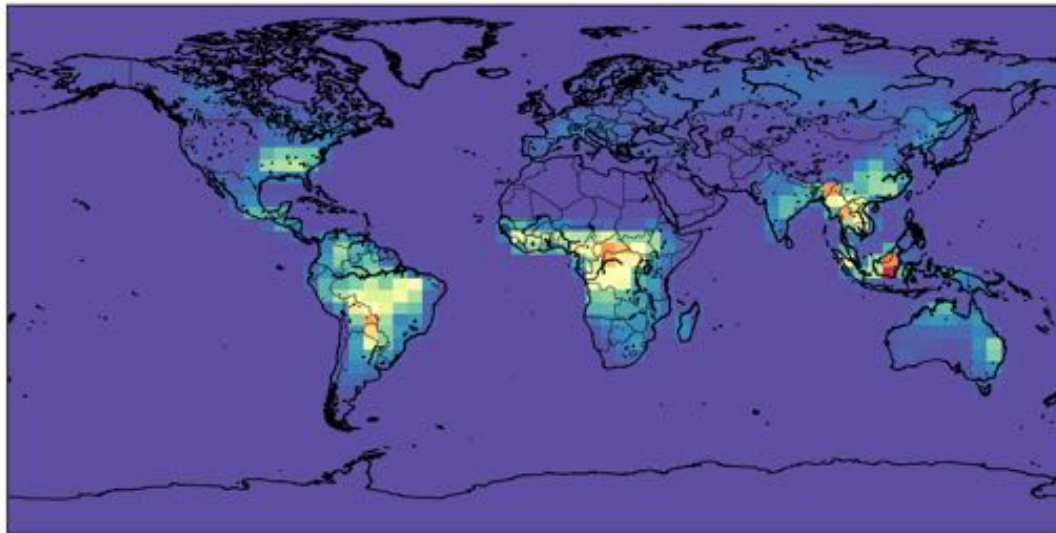
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

MACRN

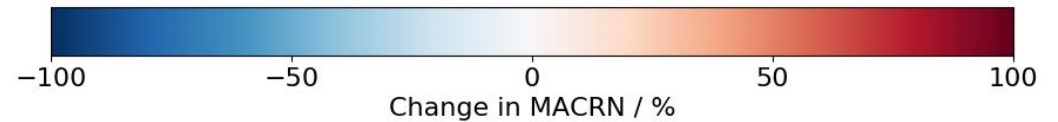
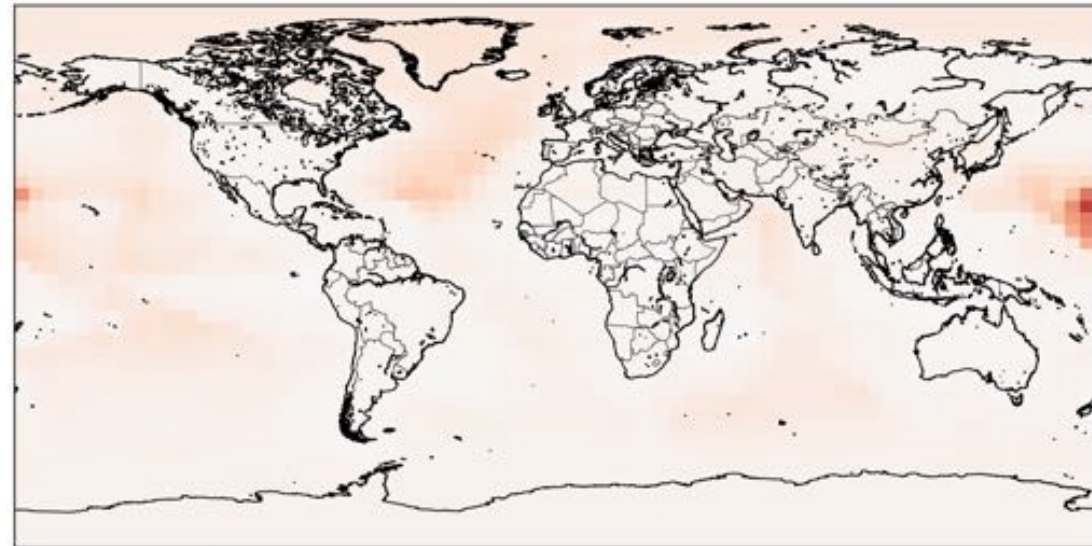
4x5



1x1



Percentage Difference

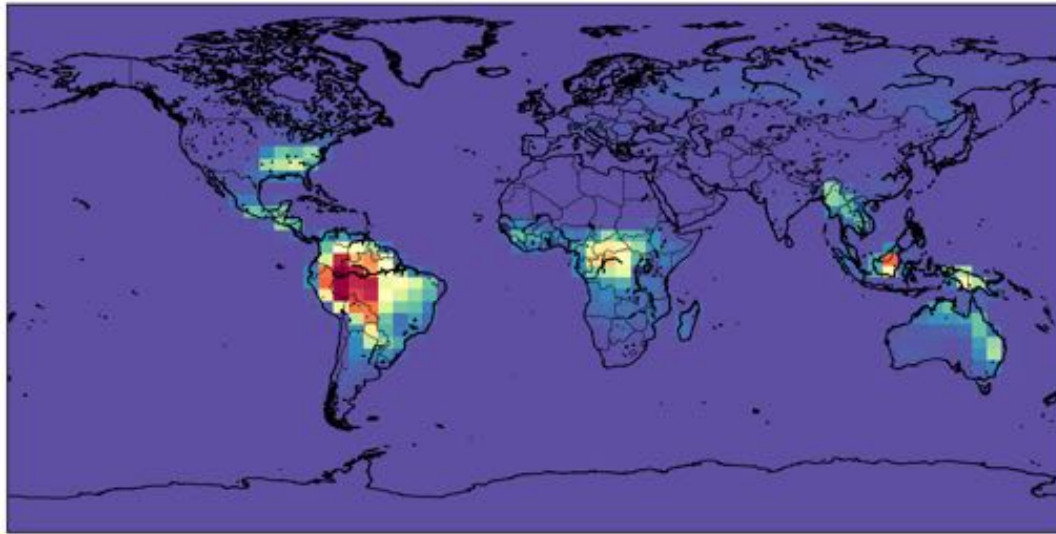


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

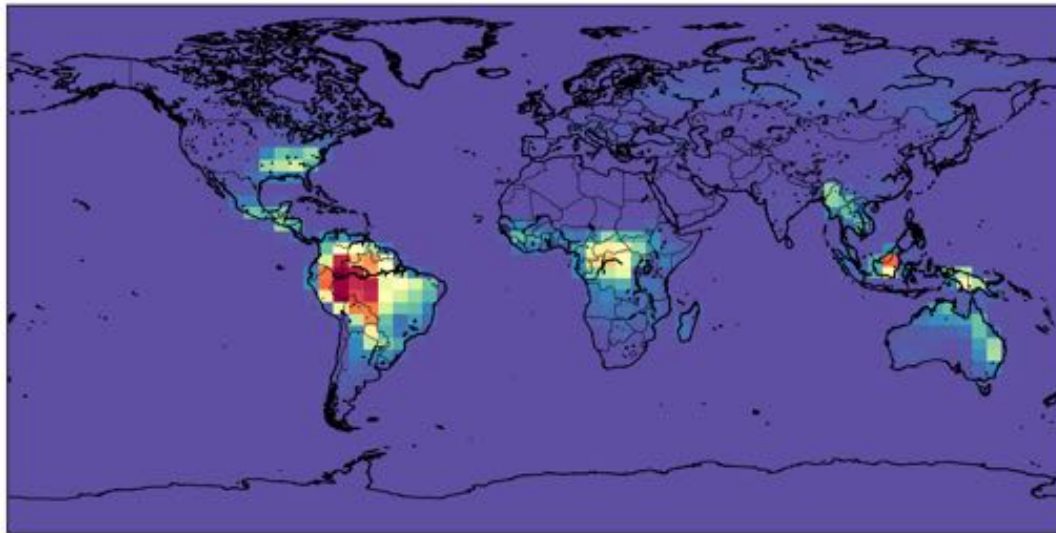
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

RIP

4x5

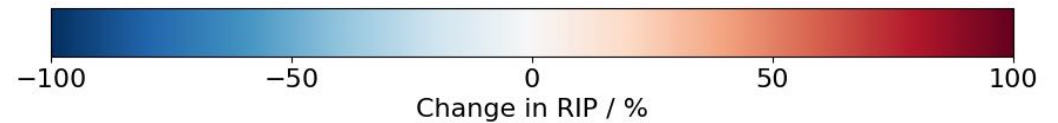
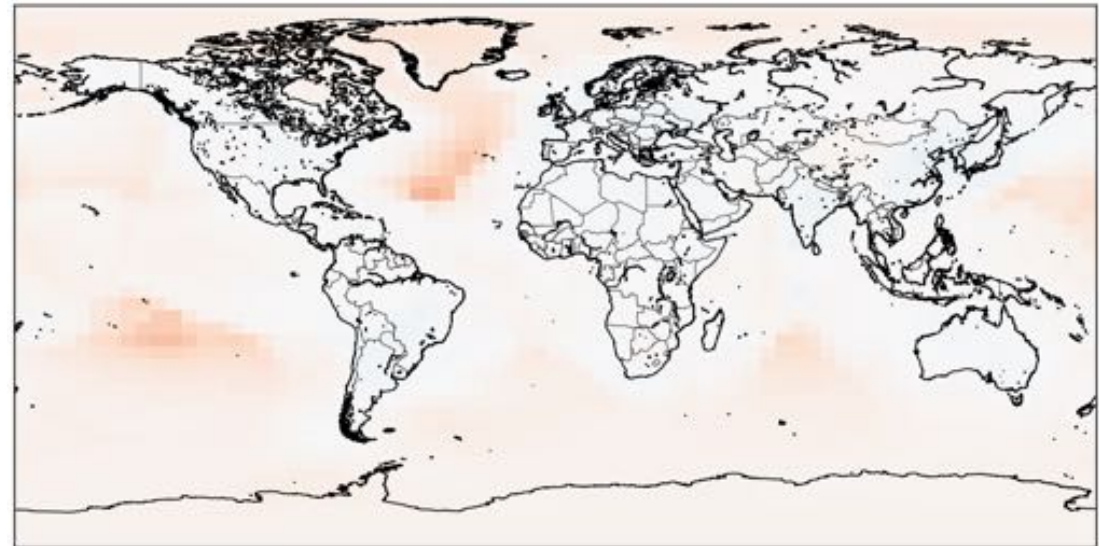


1x1



RIP / ppbv

Percentage Difference

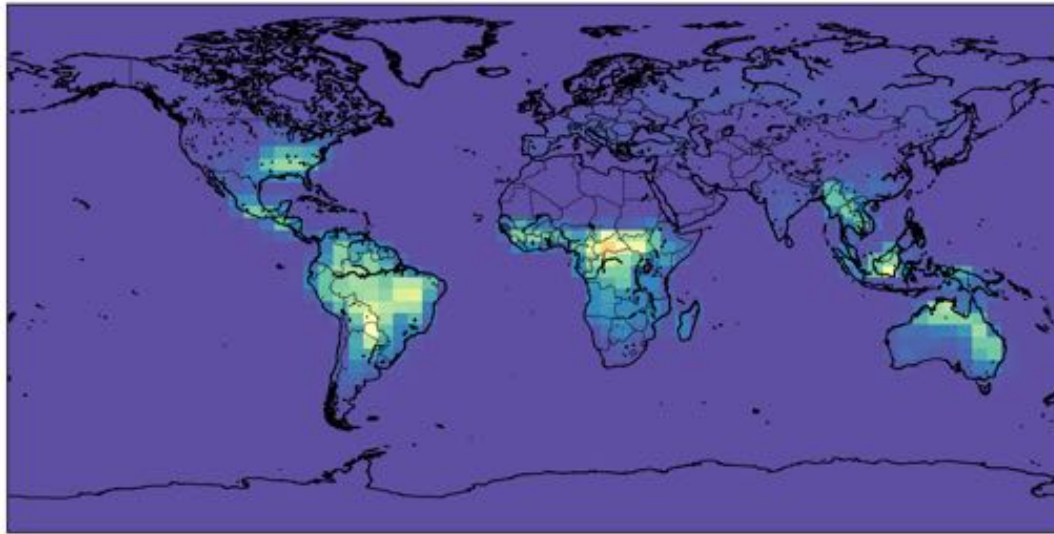


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

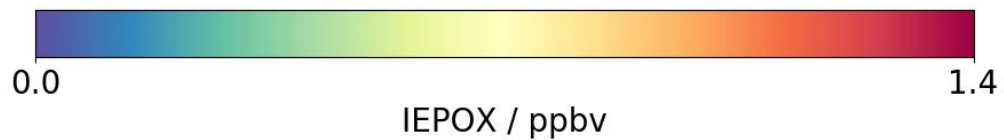
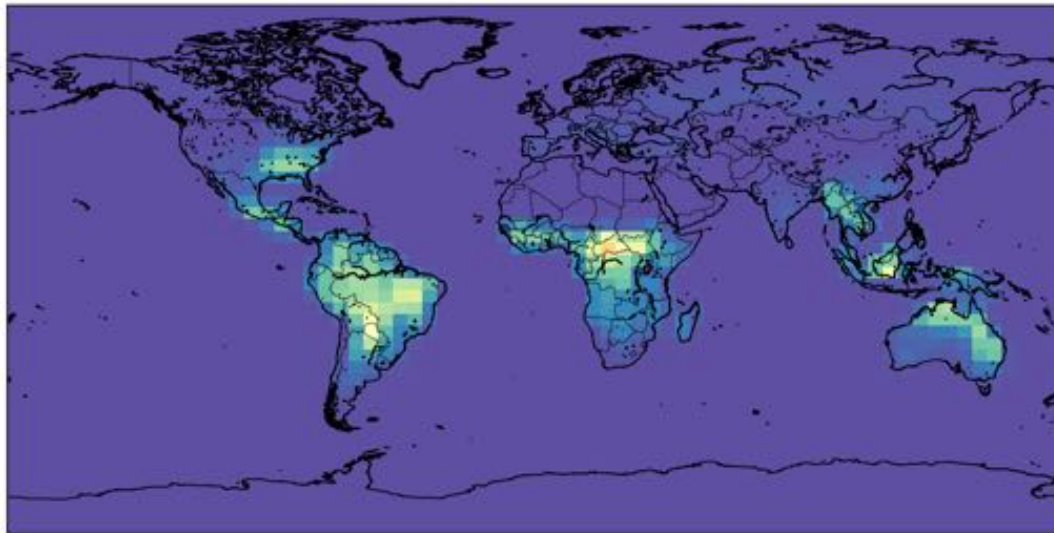
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

IEPOX

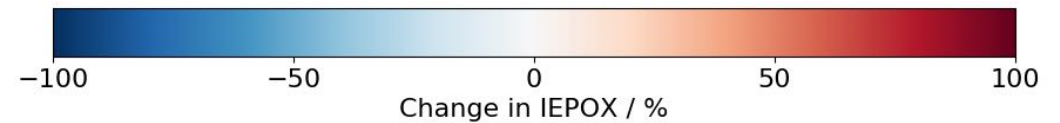
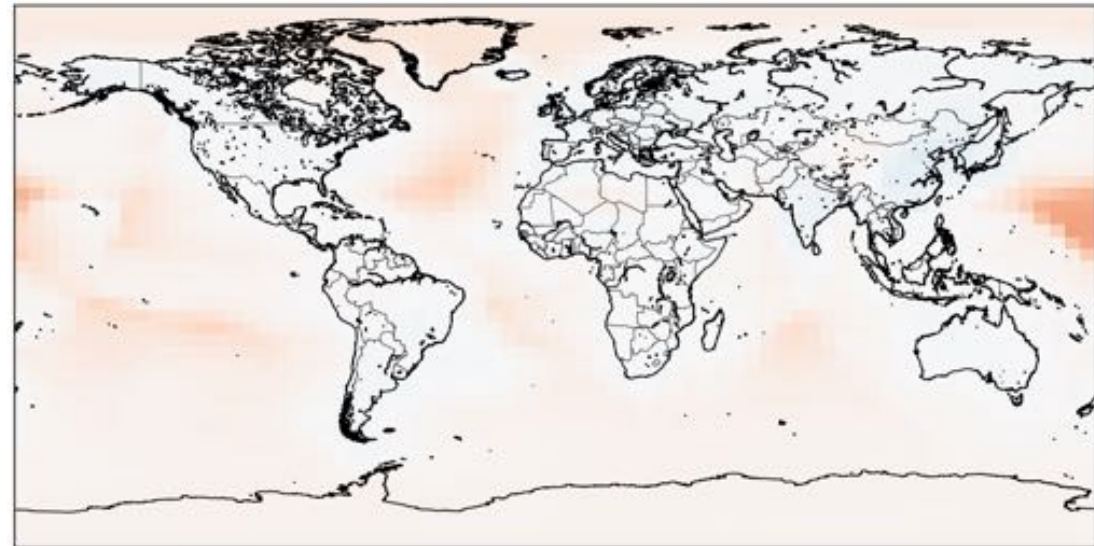
4x5



1x1



Percentage Difference

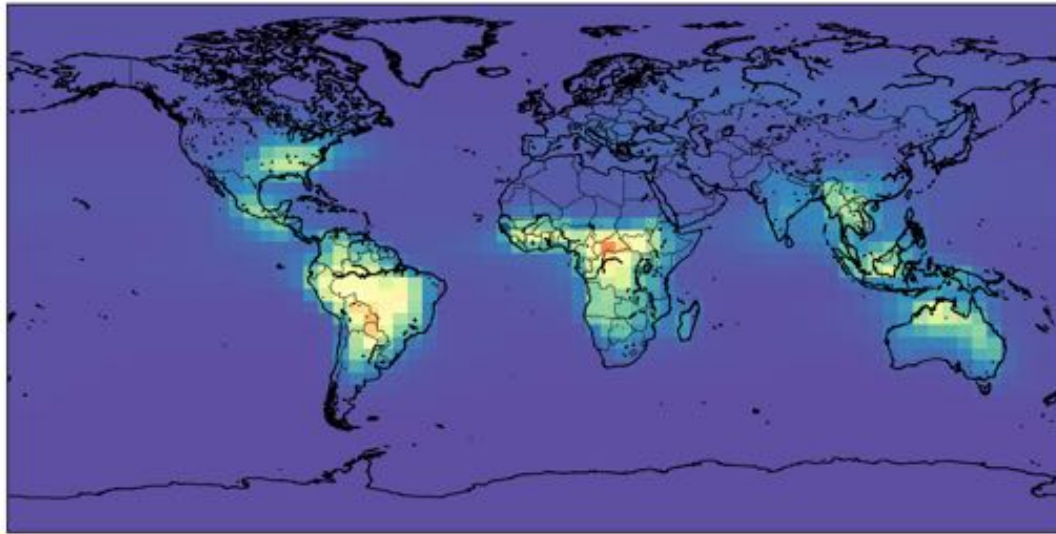


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

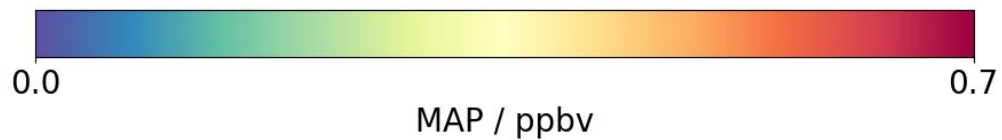
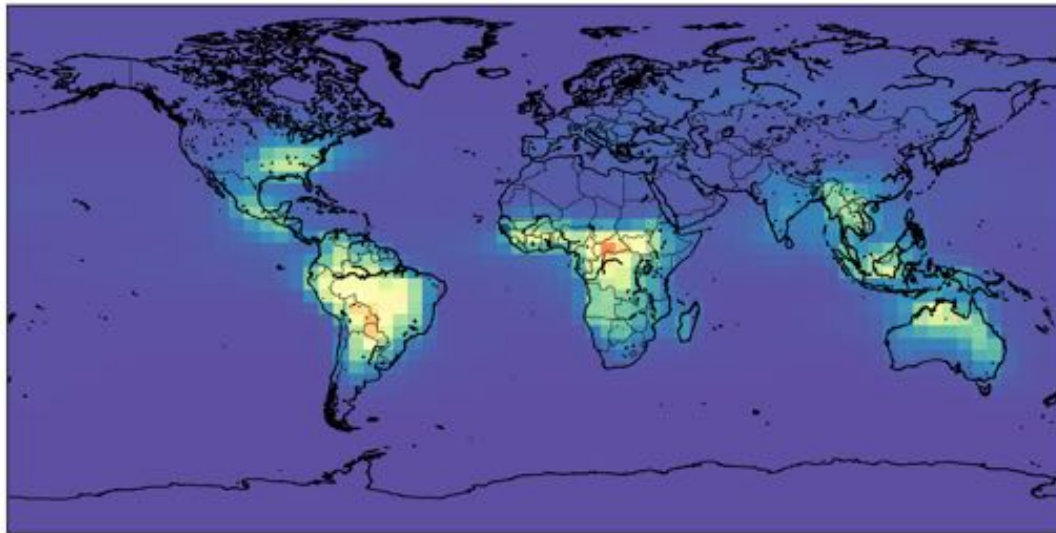
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

MAP

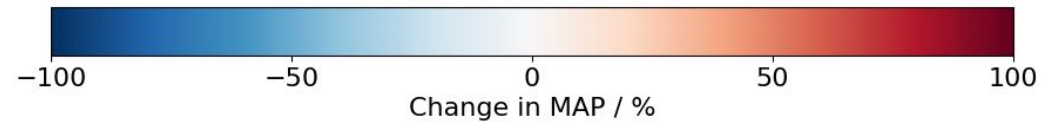
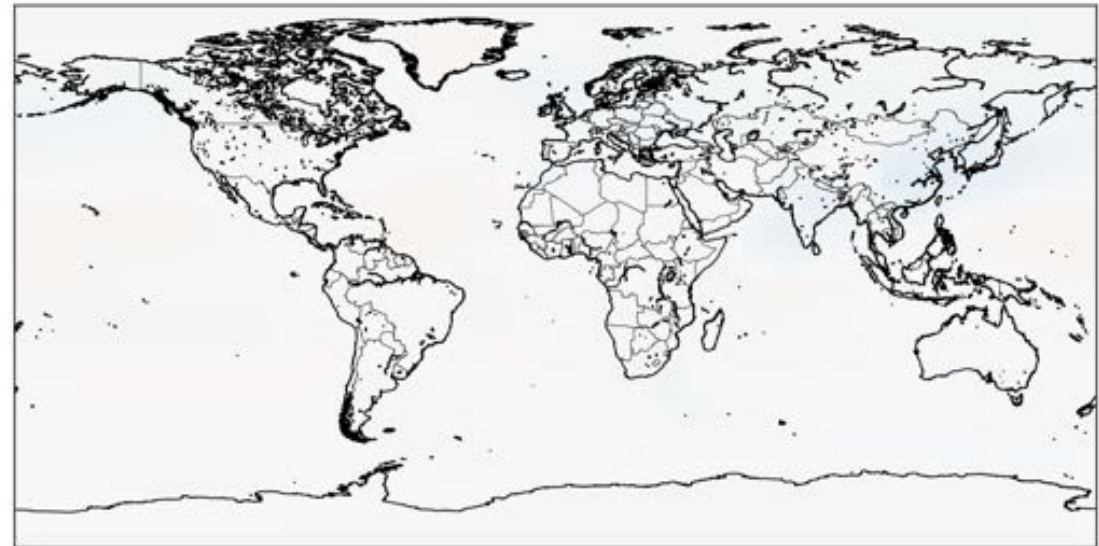
4x5



1x1



Percentage Difference

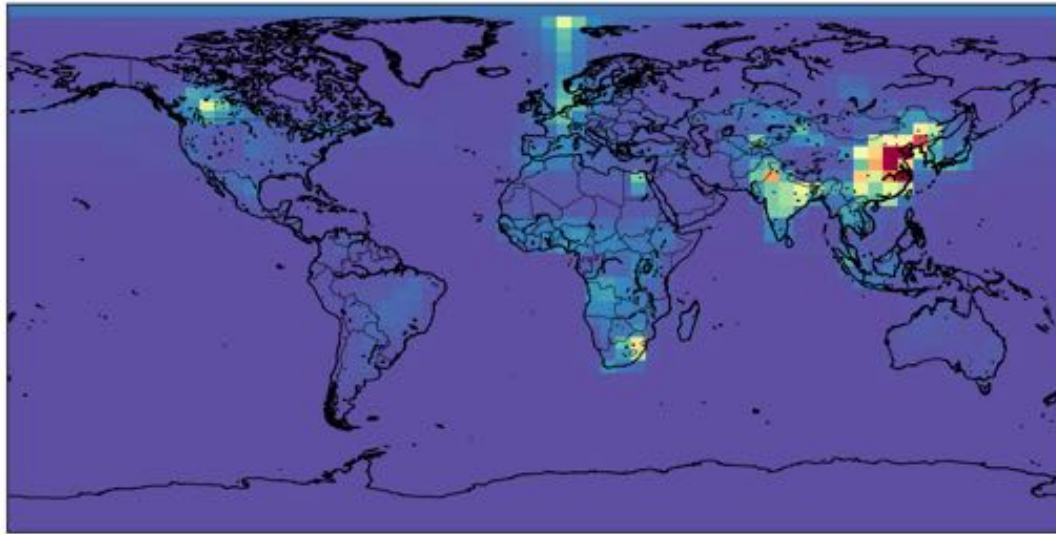


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

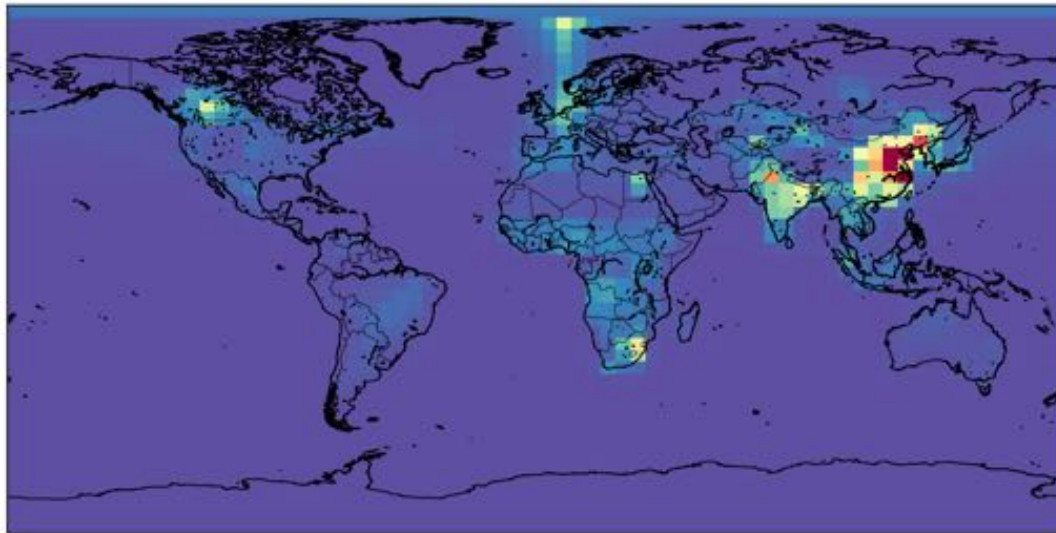
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

NO2

4x5

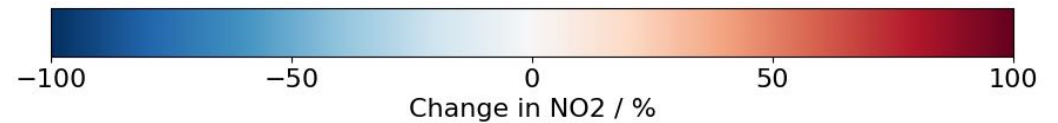
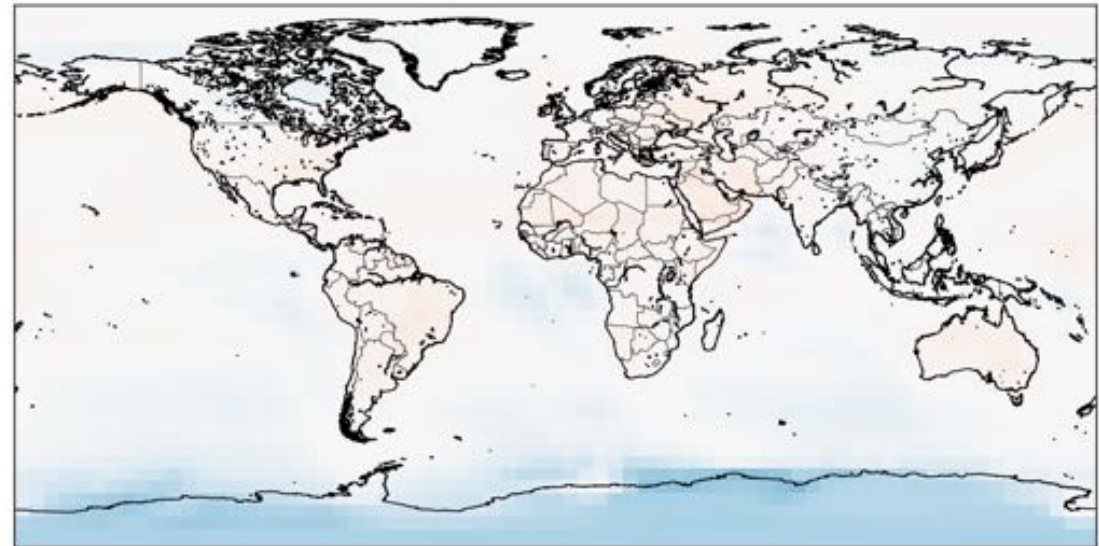


1x1



NO2 / ppbv

Percentage Difference

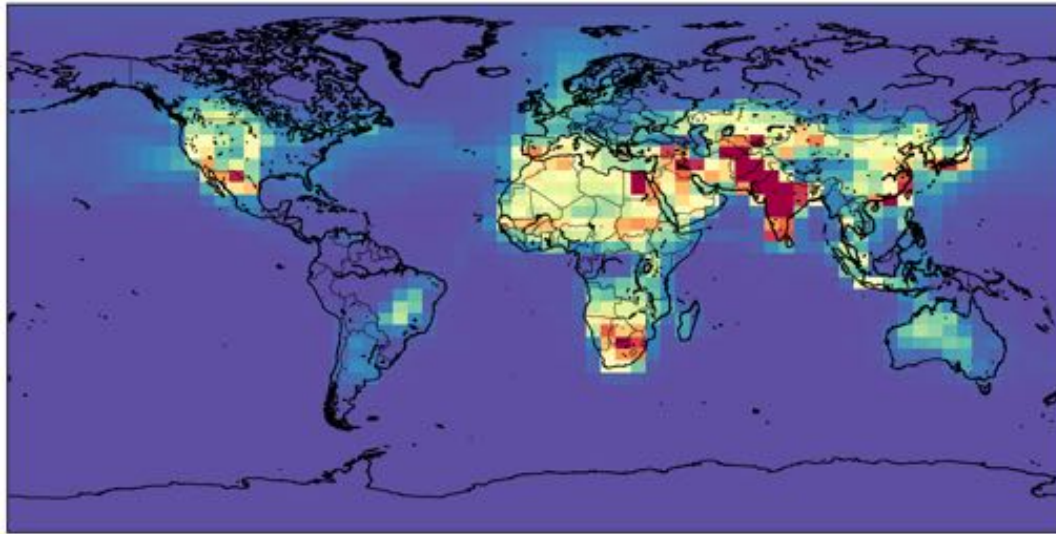


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

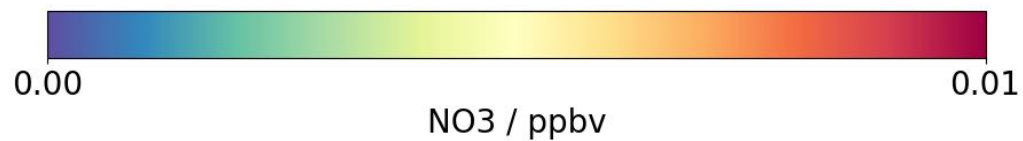
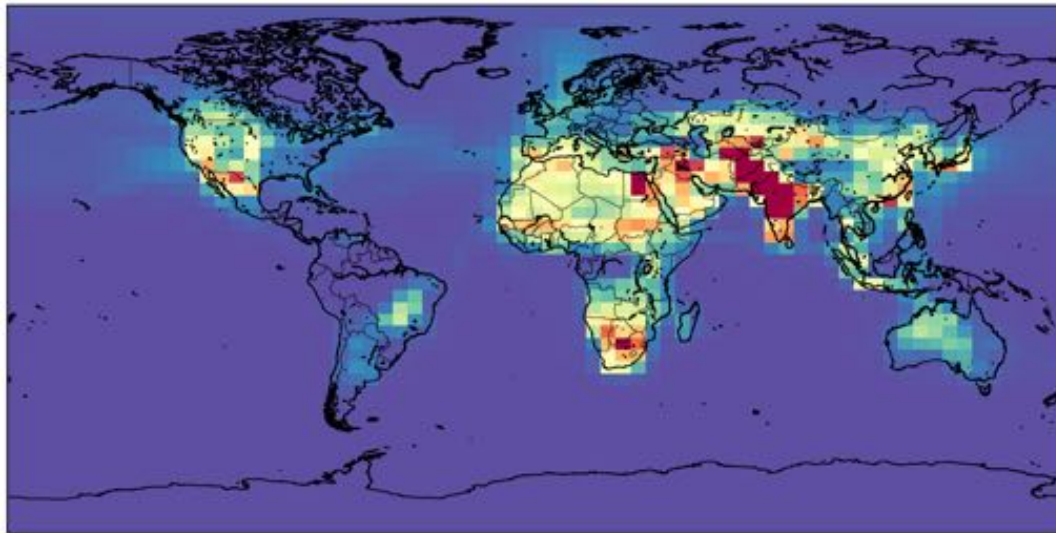
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

NO3

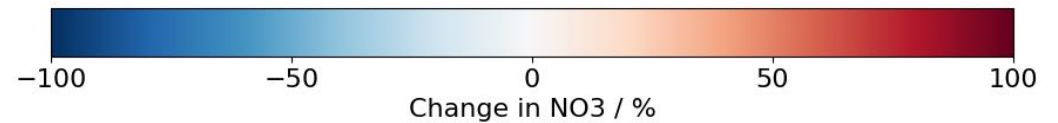
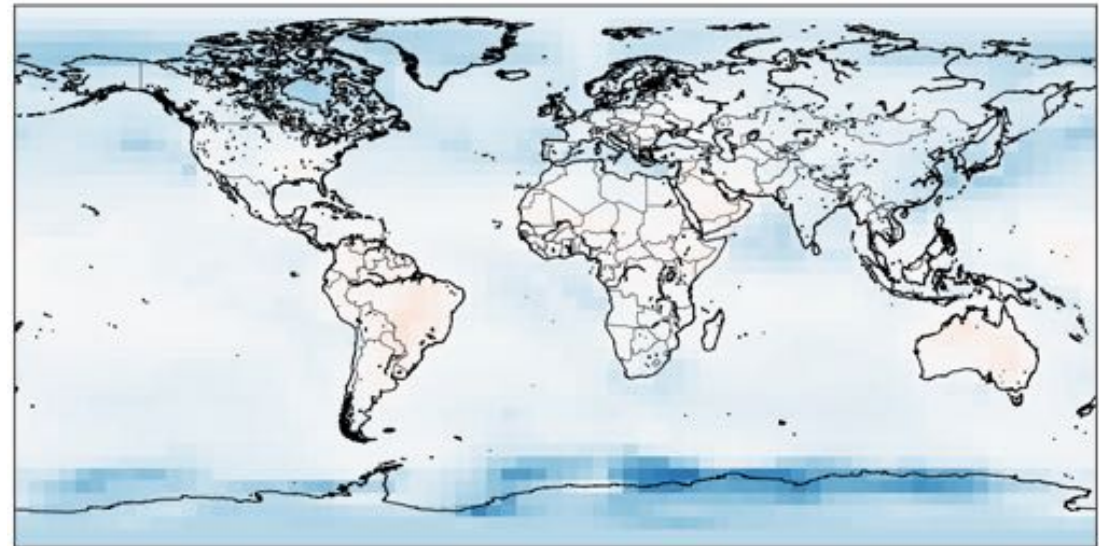
4x5



1x1



Percentage Difference

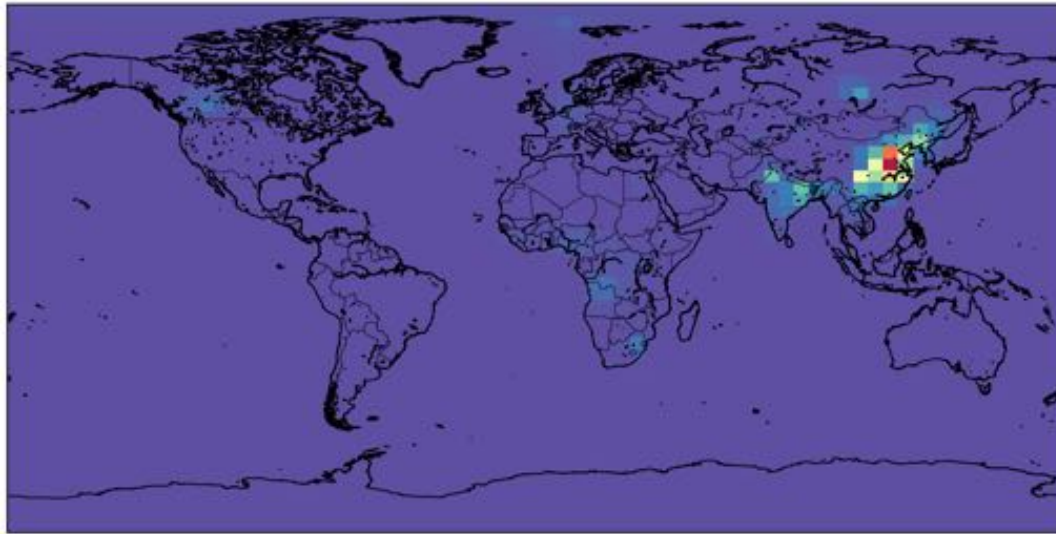


Positive Change (Red) = Concentration higher using 1x1 degree NH3 emissions

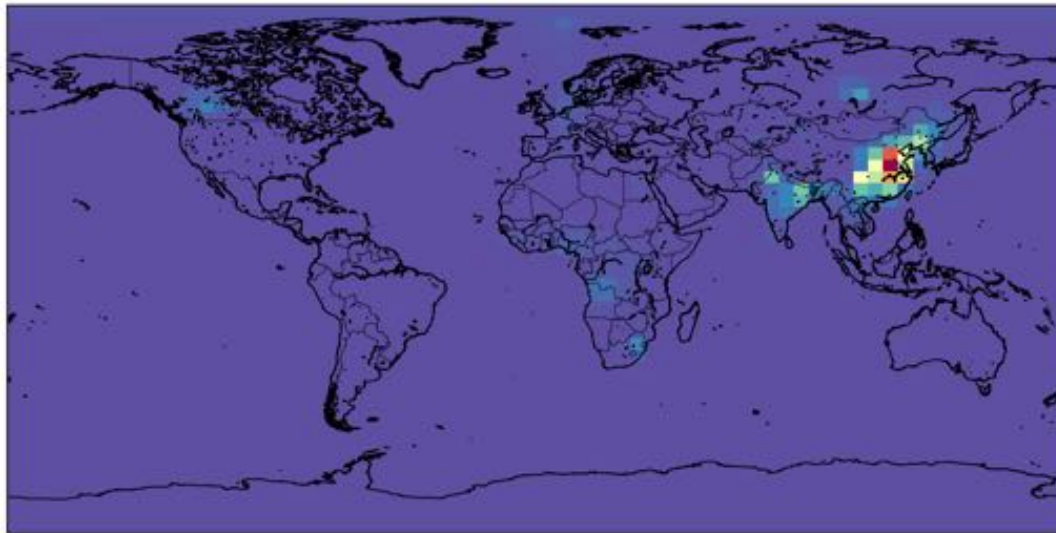
Negative Change (Blue) = Concentration higher using 4x5 degree NH3 emissions

HNO₂

4x5

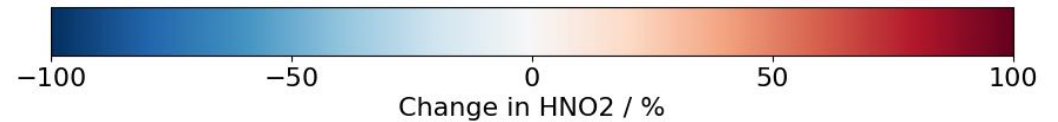
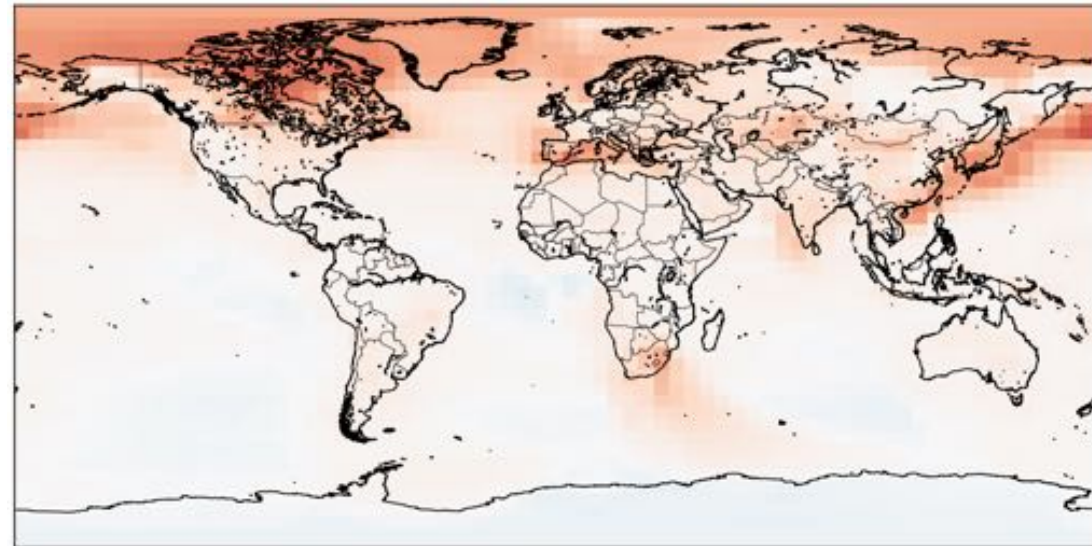


1x1



HNO₂ / ppbv

Percentage Difference



Positive Change (Red) = Concentration higher using 1x1 degree NH₃ emissions

Negative Change (Blue) = Concentration higher using 4x5 degree NH₃ emissions